

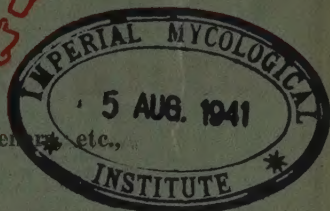
# THE FRUIT WORLD

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Vol. XLII.

No. 6

JUNE 5th, 1941

Price 6d.

### Special Articles This Month

Seasonable Orchard Notes  
Pre-Harvest Drop of Fruit  
Fruit Packers Wages  
Dried, Canned and Citrus Fruits  
The Goulburn Valley, Victoria  
Potato Virus Diseases

Murrumbidgee Irrigation Areas  
Notes from Tasmania  
Apple and Pear Marketing  
Production of Vegetable Seeds  
Almond Culture  
Pig, Poultry and Home Notes

South Australian News & Notes

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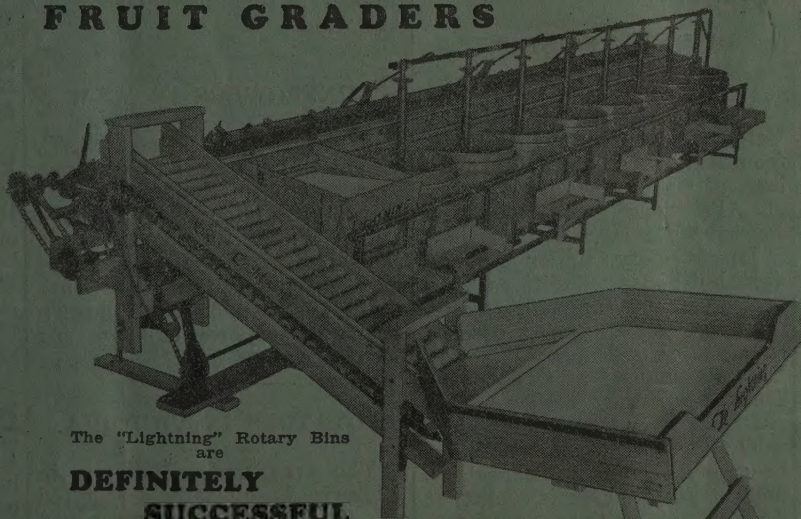
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## The Market Grower

**BROWN VEGETABLE WEEVIL.****Measures for Control.**

The grubs of the Brown Vegetable Weevil are found during the Winter and early Spring, and although most vegetables are attacked, this pest is particularly destructive to the tops of Carrots, Beetroot, Lettuce and Radishes. The adult weevils begin to appear in August and September, and during the present season many reports have been received of severe injury by these adults to Potatoes and Tomatoes, which seem at present to be the preferred cultivated host plants. The most severe injury from this pest is experienced during October and November from the fully-developed adult weevils.

In addition to damaging vegetables, the Brown Vegetable Weevils attack most weeds and are particularly common on Cape Weed. Clean cultivation is, therefore, a big factor in control, and weeds should be destroyed early in the Winter to prevent any large increase in weevil numbers. Weed destruction late in the season will simply cause a migration of weevils from the dying weeds into the cultivated areas.

Several instances of damage to young Peach and Pear trees have also been recorded.

When crops such as Turnips, Carrots or Beetroot are being attacked the grubs may be controlled by spraying or dusting with arsenicals.

**Spraying:** For spraying use: Arsenate of lead powder, 2 oz.; water, 4 gallons. A useful spreader for this spray may be made by mixing together 1 oz. of casein and 4 oz. of hydrated lime. This casein-lime mixture is used at the rate of 1 oz. to every 4 gallons of lead arsenate spray.

**Dusting:** For dusting, mix together: Arsenate of lead powder, 1 lb.; hydrated lime or kaolin, 4 lb.

Where control measures have not been adopted early, it sometimes becomes necessary to replant in areas heavily infested with grubs. Under such conditions the remnants of the crop should be gathered and removed from the ground. After an interval of two or three days chopped Lettuce or Turnip leaves, or even Cape Weed and Marshmallow foliage, dusted or sprayed with lead arsenate, should be scattered over the ground late in the afternoon.

Should suitable green foliage not be available the following poisoned mash may be substituted: Bran, 24 lb.; molasses, 4 lb.; sodium arsenite or Paris green, 1 lb.; water, 2½ gallons.

The sodium arsenite is dissolved in the water and the molasses is then added and the mash prepared. If Paris green is used it should be mixed dry with the bran and the mash is then made with the water in which the molasses has been dissolved.

**DISEASE-RESISTANT TOMATO.**

A new variety of Tomato, Vetemold, was recently sent from America to Mr. John Douglass, of the N.S.W. Department of Agriculture, who has now carried out tests.

This variety, under Australian hot-house conditions, has proved almost completely resistant to Leaf Mildew, a disease that has caused heavy losses in the glasshouse and hothouse Tomato-growing industry in Australia over the last 10 years. The Vetemold has not yet been tested out in cold glass-houses, and its type is such that it will not pollinate perfectly under coldhouse conditions.

Mr. N. S. Shirlow, of Hawkesbury College, is now carrying out work with the crossing of Vetemold with unheated glass-house varieties, including M.O., which has shown Fusarium Wilt resistance.

**ASPARAGUS.**

Asparagus is a most wholesome vegetable, and it thrives best in soil containing a large proportion of sand. Rich alluvial river flat soil, too, produces large and good quality Asparagus.

Garden beds for growing Asparagus can be made by trenching the ground 2½ ft. to 3 ft. deep and working in very substantial quantities of decayed animal manure.

Plant seedlings now in prepared beds.

Although three-year-old plants may be safely lifted for transplanting, yearling or two-year-old plants are to be preferred. Make a mound or ridge when planting so that the roots can be given a downward tendency.

Allow at least 3 ft. between the rows and from 2 to 2½ ft. between the plants in the rows. After planting, mulch the ground with a thick coating of stable manure. Bone dust and blood manure are also recommended. An abundance of water is necessary in dry weather. In exposed positions give some support to the stems to prevent them being broken by the wind.

**SUNFLOWERS IN N.S.W.**

A grower at S. Casino, N.S.W., recently realised £37 a ton from a 10-acre crop of Sunflowers. He considers Sunflowers have a good future, in N.S.W., coastal areas, both for market purposes and as feed for pigs. Sunflowers are stated to be more easily grown than Maize, especially on old paddocks.

**POTATOES IN VICTORIA.**

The area under Potatoes in Victoria is officially estimated at 35,400 acres, as compared with 32,177 acres planted in 1939-40. A yield of 190,000 tons is anticipated.

Prices for prime Potatoes declined from £4/10/- per ton at the beginning of April to £3/5/- per ton at the end of that month.

**DISEASE RESISTANT VEGETABLES.**

Success in growing disease-resistant vegetables is reported in a recent Bulletin from the U.S.A. Department of Agriculture.

Rust now is of minor importance in growing Asparagus due to Rust-resistant varieties, of which Mary Washington is the most popular. Nine Cabbage varieties are resistant to Yellows or Fusarium Wilt. Varieties of Lettuce resistant to both Brown Blight and Downy Mildew have been developed.

Selections from Climbing Beans of the Kentucky Wonder type resist some forms of Rust. Varieties of Red Kidney Beans resistant to Anthracnose have been developed. Marglobe, Pritchard and Glovel Tomatoes are stated to be resistant to Fusarium Wilt and Nail-Head Spot.

**HOW TO STORE PUMPKINS.**

Unmatured Pumpkins will not keep like thoroughly ripened ones, but will go mouldy if left long after being cut. The intervention of frosts always means a certain percentage of unripe specimens, and care should be taken to use these as soon as possible.

It will be found that if the Pumpkin is left until it is difficult to pierce the rind with the thumb nail, it will keep throughout the Winter, provided it has been pulled with a short stalk attached. Pumpkins from early sown crops keep better than those from late sown crops, as they have longer to ripen off.

Care should be exercised that Pumpkins are not bruised in handling. They should be stored (preferably on slatted shelves) in a dry, airy room, and should be examined from time to time, any showing sign of decay being removed.

"Darling, you've made me the happiest man on earth!"

"Only on earth? The last man I was engaged to said he was in his seventh heaven."



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## News of the Month

### WORLD VALUE OF CO-OPERATION.

"Competition between men encourages greed and avarice and lust to power, and these things in turn bring war, sorrow, misery, poverty and unemployment, whilst full co-operation between men will produce harmony and peace, prosperity and happiness, and better communal living; because under such a system the sin-causing profit-making bug is destroyed." — "The Co-operator."

:: :: ::

### YOUNG FARMERS.

The importance of the Young Farmer movement is now more generally recognised and is deserving of every encouragement.

No time than the present could be more opportune for the training of the rising generation in correct cultural methods and in instilling the principles of science.

Considerable progress has been made in the several Australian States and in New Zealand in developing the Young Farmer Movement. The enterprise of the Victorian Young Farmers' Clubs Association in conducting a school or short term course on modern agricultural practice from May 19 to 30, is worthy of every commendation.

### PERSONAL.

Miss Lorna Byrne, of the N.S.W. Dept. of Agriculture, has been selected as the Queen of Rural Industries in the forthcoming Queen Carnival in N.S.W. to raise funds for the Red Cross. Miss Byrne has a gracious personality: she is widely known and respected for her work in connection with the N.S.W. Agricultural Bureau: her committee aims at raising £12,000 by means of 3,000,000 votes at 1d. each. All votes must be in by June 18.

:: :: ::

Mr. J. G. B. McDonald, M.L.A., of Shepparton (Vic.), is esteemed for his vigorous representations on behalf of the fruit in-

dustry and the man on the land generally. Recently, he expressed disapproval of an attempt by outside interests to dominate members of Parliament. Normally, he is opposed to composite Ministries, but under stress of war conditions, advocates nothing short of national unity.

:: :: ::

Mr. Fred Chilton, of the Sydney Fruit Markets, has been relieved of a great strain because of receiving a cable announcing the safe return of his son, Col. F. Chilton, D.S.O., who was previously reported missing. Another son, Major H. M. Chilton, is on active service.

:: :: ::

Mr. Noel V. Wade, of 16 Bridge-street, Sydney, N.S.W., formerly assistant representative in Australia for The Manchester Ship Canal Company (The Port Authority for Manchester), has been appointed the company's representative for Australia and New Zealand, in succession to the late Captain W. J. Wade, M.B.E. Before entering the service of The Manchester Ship Canal Company, Mr. Wade was for some years in England attached to the head office staff of the Booth Steamship Co. Ltd. Mr. Wade is well-known in Australian shipping and export circles and has frequently visited the various Australian States and Dominion of New Zealand in connection with the extension of direct trade with the great industrial area in Northern England served by the Port of Manchester.

### OBITUARY.

Sincere sympathy is extended to Mr. Arthur H. Stevenson, Supt. N.S.W. Committee of the Apple and Pear Marketing Board in the loss of his wife.

:: :: ::

We regret to announce the recent death of Mr. R. J. Hack, who was clerk in the N.S.W. Dried Fruits Board. The Board placed on record, at its last meeting, its appreciation of the work done by the late Mr. Hack, and the sympathy of the Chairman, members and staff of the Board was conveyed to Mrs. Hack.



## OBITUARY.

Mr. John Tully, of Main-road, Doncaster, one of Victoria's best-known orchardists, died on May 29, at the age of 78 years. Mr. Tully, who was born in Don-



A recent picture of the late Mr. John Tully and his Widow.

caster, was a kindly, courteous gentleman, esteemed by all who knew him. He started his business at Doncaster as a young man with the late Mr. T. Petty, and maintained his interest in

it throughout his life. He was chairman of directors of the West Doncaster Cool Stores for 30 years.

For many years he was a member of the Doncaster Shire Council, on which a son now sits. He took a prominent part in the affairs of the Church of Christ and the Independent Order of Rechabites, and filled the highest offices in both bodies. He was Conference President of the Church of Christ and District Chief Ruler of the I.O.R. Until he resigned a year ago he was also a trustee of the I.O.R. in Victoria.

An unusually active man, Mr. Tully played cricket and tennis until comparatively recently, and played cricket with the Doncaster Heights Club for 50 years.

The late Mr. Tully visited England several years ago as a representative of Victorian

## PITHY BITS ...

by "GADABOUT"

## Again the War.

Get the **most head** view of the war—God is in the Heavens and the heart of the British Empire still throbs steadily. Greece, Crete, The Hood, The Battle of the Atlantic, London and the bombed cities of Britain—**just incidents** behind which stands a heroism that has never been exceeded—an epic of human bravery.

fruitgrowers to enquire into fruit marketing methods there. He was a delegate to many Victorian and interstate conferences of fruitgrowers.

He is survived by his widow, three sons and four daughters. The funeral, which was widely attended, took place at Box Hill Cemetery on May 31.

All for nothing?—Not on your life—a try out for the real fight that's coming. Smile on and smile again. John Bull—like the rock that withstands the Northern Gales—stays put.

Does one remember the last war. The first Battle of Ypres, when that immortal line of British Khaki "stayed put." They changed **hell** into **held**. The British were outnumbered 10 to 1—the German avalanche had rolled on and on.

"You can't hold out much longer," said an officer to Lord French, the Commander-in-Chief. His reply: "You must hold."

Sir Douglas Haig was ordered into the shambles. Cooks, orderlies, servants, exchanging the frying pan for the rifle, followed him in—trim, well-groomed, serene, sitting his horse erect and unafraid, followed by his escort of the 17th Lancers, as perfectly turned out as if on a peace parade—rode into the front lines and beyond. Overhead the incessant shriek of shells and all around carnage reigned. His calmness and strength passed to the tired and battered troops; it galvanised the warring strength in the gory trenches.

The retreat became an advance. The broken line was restored. The history of the world was changed.

History will repeat itself.

Again Apple and Pear Acquisition.

The Parliamentary Select Committee are now holding their enquiry.

They have visited New South Wales, Queensland, Tasmania and are now visiting South Australia. They have taken some evidence in Victoria and will be returning again in about three weeks' time.

To "Gadabout" it seems that there is too much evidence being submitted, either that "everything is all right" and on "everything is all wrong." Is there not something still better; something that may permanently help to stabilise and develop—not retard—the fruit industry?

Is it not possible to get together for everybody's sake?

A suggestion has been made that the present compulsory acquisition scheme should be changed into a voluntary, or optional, pool, to which the grower sells his fruit at rates somewhat on the present basis, but equitably adjusts or decides to sell it himself.

The grower would deal with the pool as he now deals with a factory.

"Gadabout" invites correspondence on this proposal. Say all you can either for, or against it, or submit something better. Make your letters short and to the point. To-day may hold a turning point either towards calamity or towards better days for us all.

**As Spraying is a Necessity**  
**—then use the World's Best—**

# NEPTUNE SPRAYS...

The better quality of **NEPTUNE** Sprays is always obvious by comparison with others. **NEPTUNE** Sprays conform to the highest standards, and they are consistently uniform in strength and quality. Successful Orchardists recommend them. Try them yourself and prove that they're better!

## NEPTUNE WHITE SPRAYING OIL (SUMMER SPRAY)

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(“A,” “C,” or Heavy Base)

NEPTUNE PALSOL  
(Prepared Pale Oil)

NEPTUNE CLARIFOL  
(Winter White Oil)

NEPTUNE LIME SULPHUR  
SOLUTION  
(Clear, amber-coloured, free from sludge)

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BLUESTONE

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COPPER SPRAY

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SPREADER





# Seasonal Orchard Notes

## Almond Culture :: Cultivation of Lemons Pruning :: Spraying :: Orchard Sanitation

(By J. L. Provan, B.Ag.Sc., Senior Hort. Instructor, Vic. Dept. of Agriculture.)

**D**URING June, the deciduous fruitgrower will turn his attention to the pruning of his trees. During the pruning operation the grower will have to consider whether pruning will be heavy or light. Which of these courses is adopted depends on the vigor of the tree as indicated by the length and maturity of the annual growth made last year, and the numbers and development of the blossom buds on the spurs and laterals.

### Spraying.

In addition to a careful examination of the state of the tree with regard to pruning practice, the observant grower will examine limbs carefully for the presence of **San Jose scale**, particularly on Pear trees in orchards where traces have been found in the past. If the scale is not widespread, then infested trees should be marked and particular spray applications should be given to these trees.

One of the best means of controlling these scale insects is a thorough application of a combined spray of two gallons of Winter oil and five gallons of lime sulphur made up to 80 gallons of water.

Two other sprays which are also frequently used for this purpose are straight lime sulphur, 1 gallon in 10 gallons, or a red oil spray 1 in 14.

Trees which are heavily infested with **San Jose scale** should receive two spray applications. As well as controlling **San Jose scale**, the above will be found useful for **red spider** and **bryobia mite** and the lime sulphur sprays particularly, give a very satisfactory control of the **Pear leaf blister mite**.

The **Peach** and **Cherry pruner** should be on the lookout for eggs of the **green Peach aphid** and

**Cherry aphid**. The eggs of both these pests can usually be found clustered around the buds.

After pruning, **Peach**, **Nectarine** and **Cherry** trees should receive a 3 per cent. tar distillate spray. Thorough application is necessary if this ovicide is to be effective. The spray is best applied towards the end of June or during the first two weeks of July.

In some cases, growers have applied this spray too early, with the result that some egg-laying has taken place subsequently, and although the infestation is not usually heavy, the grower has been troubled in the Spring by small colonies of the aphid hatched from these late laid eggs.

### Orchard sanitation

should be continued this month. Tree trunks, etc., should be carefully cleaned to remove overwintering codling moth, and in some orchards, mealy bug. This latter pest shelters in the bark, and removal of this loose bark followed by an application of lime sulphur assists in its control.

**Brown rot** of **Apricots**, **Peaches** and **Cherries** can be reduced by careful orchard hygiene comprising the collection and destruction by burning of all mummified fruits and the pruning of diseased twigs and spurs. The soil around the base of tree which normally misses cultivation should be cultivated because mummified fruit frequently lodges in these areas and spores are liberated from them in the Spring.

### Almond Culture.

Many growers in the northern districts are turning their attention to the cultivation of **Almonds**. Supplies of local Al-

monds have not been large enough to meet the demands of the home markets, and with the interruption of imports, prospects for home-grown Almonds are distinctly brighter. Well-drained soils in Northern Victoria, provided irrigation is available, are suitable for Almonds. The Almond tree is a particularly vigorous grower under suitable conditions and commences to fruit in its third or fourth year. The Almond seedling root-stock is recommended for all plantings.

The most popular variety is undoubtedly **Hatch's Nonpareil**, and there is a big demand for the kernel of this nut. The principal varieties recommended in addition to **Hatch's Nonpareil** are—**I.X.L.**, **Chellaston**, **Riverside Peerless**, **Johnson's Prolific**, **Jose's B.I.**, **White Nonpareil**. **Ne Plus Ultra** is a good nut, although it does not store well. Careful attention must be paid when planting to ensure that adequate cross-pollination is provided, otherwise Almond yields are likely to be disappointing.

Suitable pollinators for **Hatch's Nonpareil** are—**Ne Plus Ultra**, **Johnson's Prolific** and **White Nonpareil**. **I.X.L.** can be cross-pollinated by **Riverside Peerless**, **Johnson's Prolific** and **White Nonpareil**. **Chellaston** is an early blooming variety and can be cross-pollinated by **Brand's Jordan**, **Early Paper-shell** and **Riverside Peerless**. **Brand's Jordan** has not been recommended as a variety to plant because generally it is a shy bearer. For pollination purposes, however, it can be grafted on to trees of the varieties to be pollinated.

### Growing Lemons.

Growers who intend to plant **Lemon** trees are advised to plant strong yearling trees in preference to older trees, unless the latter can be obtained "ball-rooted." Generally speaking, however, the supply of ball-rooted trees is small, and the added cost of the trees, plus the heavy freight charges, deter

## New Nectarine

"P. Flood," Originated in Brighton. Outstanding quality and market value. Orchardists should plant this variety. I can offer well-grown trees worked from the original.

**G. L. COLE**

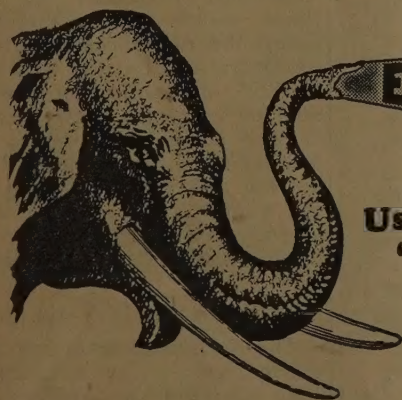
"Rosaltan" Nurseries, Tyabb, Vic.  
Phone: Tyabb 252.

growers from planting large areas of this type of tree. Very satisfactory results can be obtained by planting strong, yearling trees which are received "bare-rooted" from the nurseryman. The nurseryman packs these trees in one of two ways—the roots are either "mud-puddled" and then packed in wet moss, or the mud-puddle may be omitted and the roots packed promptly in wet moss. On receipt of the trees, the mud-puddle should be carefully washed off, and both types of trees should be stood in water for about 12 to 18 hours before planting.

The top growth of bare-rooted trees should be drastically reduced as soon as they are received because the leaf area continues to draw on the tree for its moisture. The main arms should be reduced to short stubs 3 or 4 inches long, and all but four or five leaves should be removed. If this reduction in leaf area does not take place, then the tree undergoes gradual drying-out and fails to make vigorous growth in early September.

Planting can be made from August to early October, the ground having been carefully prepared beforehand. If manures are to be used at planting time,  $\frac{1}{4}$  to  $\frac{1}{2}$  a lb. of an organic manure, of the dry blood or blood and bone types, can be mixed with the soil before planting.

Care should be taken not to plant the trees deeply, and in shallow soils, surface rooting must be encouraged. The usual protection of the trunk against sunburn by several thicknesses of brown paper wrapped round it and tied top and bottom should be made.—(Vic. Journal of Agriculture.)



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# The Pre-Harvest "Drop" of Fruit

## Reduction by Spraying

(By C. E. Cole, B.Agr.Sc., Horticultural Research Officer, and  
D. McAlpin, B.Agr.Sc., Assistant Horticultural Research Officer,  
in the Victorian "Journal of Agriculture.")

"Growth substances" have been found in other fruitgrowing countries to reduce the pre-harvest "drop" of fruits, particularly Apples. Two of these substances have been tested on Jonathan Apples in Victoria and found to be effective and profitable. A spray of 5 parts per million of a-naphthalene acetic acid or naphthalene acetamide applied 12-14 days before picking and directed particularly at the fruit stalks is recommended. White oil, 1 pint in 100 gallons, as a spreader is beneficial. Growers are warned against leaving fruit intended for storage on the trees later than the normal picking time.

FRUITGROWERS will welcome a simple and effective means of reducing the excessive dropping of many varieties of fruits just before picking time. Many thousands of cases of fruit are lost every year because of this pre-harvest "drop," and sometimes the losses are disastrous. Once the fruit has fallen it is practically worthless, and hardly warrants the cost of picking up unless the ground has been previously strawed.

Although losses sometimes occur many weeks before the fruit is ready to pick, they are usually most serious within two or three weeks of maturity. Probably the most disheartening experience for any orchardist is to see his almost-ripe fruit, perhaps Jonathan or Delicious Apples, left on the tree a day or two longer to develop a little extra color, dropping rapidly from the trees, and to be helpless to prevent it. This no longer will be the case, however, if the orchardist adopts the preventive measures outlined in this article.

### Causes of Dropping.

Causes of dropping are many, but the chief are climatic. Heat waves in late February or early March, especially when followed by cold nights, frequently cause an excessive fall of fruit. Winds and storms about New Year time may cause a disastrous loss of canning Pears in the Goulburn Valley and later storms may tear almost mature Apples from the trees. In the 1940 and 1941 seasons such climatic factors have been major causes of fruit dropping in Victoria.

Other factors entering into the "drop" problem are codling moth and woolly aphis infestations. Codling affected fruits are more likely to drop than sound ones. Of course, they do not cause a financial loss to the grower in so doing, having been made worthless by the grub already, but the Apples which drop because the tree or limb is

heavily infested with woolly aphis do represent a direct loss.

Trees which are growing vigorously because of youth, a rich soil, or heavy dressings of nitrogenous fertilizers are apt to drop more fruit than less vigorous trees, particularly when they have a heavy crop. Dry soil conditions in late Summer, too, will loosen the fruit on the trees, and make it likely to fall.

Any or all of these factors may operate in the one season, so that the "drop" varies widely from year to year. For instance, in Jonathan Apples there appears to be a minimum loss of 10 per cent. of the crop during the pre-harvest period, even in the most favorable seasons, while in some seasons, as in the Autumn of 1940, this figure may rise to 50 per cent. or more.

In other fruit-growing countries the use of plant hormone sprays has been found to be extremely effective in reducing this pre-harvest drop of fruit. These hormones, or "growth substances," are used commercially in horticulture in many ways, chiefly to help root production in the propagation of plants by cuttings. It was observed that leaf stalks on cuttings sprayed with these hormones remained attached and green for longer periods than on untreated cuttings, and that the abscission or falling of flower parts was delayed. Such discoveries led to the idea of preventing fruit "drop" by spraying bearing trees with these substances, and the results obtained fulfilled the most optimistic expectations. Two substances, a-naphthalene acetic acid and naphthalene acetamide, which are produced synthetically, were found to be the most effective sprays. It was considered necessary to test these sprays under Victorian conditions, and check up on the concentration, and the time and method of application recommended overseas. An a-naphthalene acetic acid preparation available on the Victorian market was used for the main tests, and a later trial was made with an American preparation containing naphthalene acetamide.

### Experiments in Victoria.

The first small scale test was carried out in the Autumn of 1940 on Jonathan Apples, and as a result of the encouraging results obtained a full scale field experiment was undertaken this season at the orchard of Mr. D. Lipscombe, Croydon. The experiment was combined with an already existing fertilizer trial on Jonathan Apples so that full information could be obtained on the effects of spray and ferti-

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zer on the dropping of Apples. One-third of the plots were sprayed with a solution of a-naphthalene acetic acid 10 parts per million (i.e., 0.001 per cent.) and one-third with a 5 parts per million (i.e., 0.0005 per cent.). The remainder of the plots were left unsprayed. One pint of white oil emulsion was added to every 100 gallons of spray to act as a spreader and to aid the penetration of the hormone.

The usual recommendation is to apply the spray as soon as there are any signs of the commencement of a major drop. It was arranged in this case that if no such signs were observed within twelve days of the proposed time of picking the sprays would be applied forthwith. This was actually the case, and the sprays were applied on February 28. The spray outfit worked at a pressure of 350 lb. per square inch using two rods with double nozzles. The spray was directed more downwards than upwards to obtain a more efficient wetting of the fruit stem. Hot, windy conditions prevailed at the time.

After spraying, the ground under each tree was cleared of old windfalls, and records were taken each day of newly fallen fruit. Two days after spraying, the effectiveness of the spray was apparent. A small drop occurred each day, but on the sixth and eighth days after spraying severe wind storms were experienced, under the stress of which the unsprayed trees lost a good deal of fruit, while the sprayed trees lost very little. The number of fruits lost from each group of 36 trees is shown in the accompanying graph. The first picking of fruit from the experimental trees was made twelve days after spraying, the remainder being picked twenty days later.

The average amount of fruit carried by each tree at the time of the spray application was 157 lb., i.e., approximately 4 bushels. In the accompanying table, the "drop" from 36 trees over the ten-day period from two days after spraying till the first picking is shown in pounds, and as a percentage by weight of the average crop of fruit carried at the time of spraying.

The difference in fruit drop between either spray treatment and no treatment is highly significant, but the difference between the two concentrations of hormone is not statistically significant, which means that 0.0005 per cent. (5 parts per million) is a sufficient concentration.

Making allowance for an observed 8 per cent. codling moth infection, the reduction, due to either concentration, in the fruit lost was therefore 22 lb. per tree, which is equivalent to 70 bushels per acre on an 18 ft. x 18 ft. planting. It should be emphasised that the 1941 "drop" in the metropolitan districts was quite normal. Had it been excessive as that which caused the loss of 50 per cent. of the crop in many orchards in 1940, it seems certain that a much larger quantity of fruit would have been saved by the spray.

As Percentage of  
Average Total Crop  
at Spraying Time.

Treatment.	Fruit Drop from 36 trees over 10- day period be- fore Harvest. In lb.	
.001 per cent. a-naphthalene acetic acid .	266	4.7
.0005 per cent. a-naphthalene acetic acid.	250	4.4
Unsprayed . . . . .	1,120	19.8
S.E. of mean of six 6-tree plots =	19.4 lb.	

With a normal average price of 4/- per bushel for Jonathans, the fruit saved would be valued at 2/2 per tree, which is equivalent to £14 per acre. The following table gives the actual costs of spray materials and labor on both a tree and an acre basis.

Item.	Costs.	
	Per tree.	Per acre.
A - naphthalene acetic acid preparation (.0005 per cent. (Concentration)*	£0 0 10	*£5 8 0
Labor . . . . .	0 0 3	1 12 0
Total . . . . .	£0 1 1	£7 0 0

\*The manufacturers of the preparation which was used in this trial advise that they could supply the a-naphthalene acetic acid in another form just as suitable for this purpose at a much lower rate.

It is evident that even this year when the dropping of Jonathans was only moderately serious, when average prices do not exceed 3/6 per bushel, and when the cost of the spray material was higher than it is likely to be in the future, application of the spray was well worth while. Further, the experiment showed that a concentration of 0.0005 per cent. is sufficient and that the methods used in timing and applying the spray were effective. The effects of fertilizers on drop were not significant.

A small scale trial with the naphthalene acetamide preparation showed that it is effective also in reducing drop. However, the quantity available was so small that although its effect was proved significant, there was not enough information to allow its effectiveness to be compared with that of the a-naphthalene acetic acid. A trial on a still smaller scale was carried out on W.B.C. Pears in the Goulburn Valley using the 0.001 per cent. a-naphthalene acetic acid spray. The results were variable and inconclusive, and a more comprehensive trial is contemplated for next year. Trials with other fruits such as Grapefruit, Lemons and Peaches are also proceeding, but are not concerned with the pre-harvest drop.

#### Practical Considerations in the Use of the Spray.

There are certain practical considerations not to be overlooked with respect to the time

and method of application of the spray, duration of the effect of the spray, and the place of such a pre-harvest spray in the orchard routine.

In Victoria, the spray cannot be timed with any degree of success by the method generally recommended—i.e., spraying as soon as signs of a major drop appear. Most such "drops" in Victoria are sudden of onset and brief of duration, and the damage may be done during the two days which the spray requires to become effective. The more practical method is to fix the spraying date a certain number of days before the picking date, the exact number of days depending on the duration of the effects of the spray on the particular variety concerned. This has been shown to vary from eight days to three weeks, and in the above experiment with Jonathans, the effects seemed to be wearing off just at picking time, twelve days after the spray applications. While definite local information on other Victorian varieties is not yet available, it is probable that the best time to apply the spray is from twelve to fourteen days before picking. A spray so late in the season will present some difficulty to growers who do not possess a stationary spray plant and whose trees are so laden that their branches interfere with the use of the spray cart, but it should be no more troublesome than a late codling moth spray. Indeed, with some varieties, the cost of the hormone spray can be reduced by mixing it with the last white oil or lead arsenate spray, there being no unfavorable reaction between them.

The method of spraying is controlled by the way in which the hormone acts. The dropping of a fruit results from the weakening of the stem just where it normally breaks when the fruit is picked. This weakening is apparently due to the tree being unable to maintain the supply of the hormone which has, up to that time kept the stalk strong. If the tree is sprayed with a synthetic hormone of the same type, which can be absorbed readily by the fruit and foliage, weakening is prevented, or even remedied, and the fruit is better able to withstand influences which tend to make it fall from the tree. By directing the spray particularly at the stalk of the fruit, a better and quicker tightening effect is obtained than if the fruit be sprayed at the calyx end or if the foliage alone is sprayed. This means that better results will be obtained by

spraying more downwards than upwards as contrasted with the codling moth method of spraying more upwards into the calyx. The amount of spray required is greater with the "drop" spray than with the codling spray because of the difficulty in hitting the fruitstalks. For example, a tree requiring 2½ gallons for a codling moth spray will take 3 gallons of the "drop" spray.

#### Insurance Value of the Spray.

Each grower must decide for himself whether a spray for the prevention of "drop" has a place in his routine. He is the only one who knows how regular and how great is his loss in fallen fruit each year and whether his crop in any year is large enough to warrant this protection. The spray must be regarded as an annual insurance measure for susceptible varieties in orchards which are prone to considerable loss and where the fruit saved will at least pay for the cost of application every year, and pay handsome dividends in many seasons. Looking at the spray in this light, and having regard to its cost, more than one application to any set of trees in one season cannot be recommended, except under unusual circumstances. In trees which are not stripped in one picking, there is normally not sufficient fruit left to justify a second spray, and in addition the remaining fruit becomes less likely to fall after the first picking.

In conclusion, a word of warning is given to growers who might use the hormone spray to allow the picking of certain Apple varieties, such as Delicious, to be delayed until they develop better color. Whilst the spray will hold the fruit on the tree a fortnight or so longer, there is no evidence to suggest that it will delay the ripening of the fruit, so that the fruit may, while coloring, become mature. This maturity, of course, is a secondary consideration to color when the fruit is to be marketed immediately, but it is a grave disadvantage when the fruit is to be stored. It is still important, therefore, that fruit intended for storage be picked at the correct maturity, and not simply left on the tree until its general color is satisfactory.

#### Acknowledgment.

The materials used in the foregoing experiment were made available through the courtesy of the Technical Department of Imperial Chemical Industries of Australia and New Zealand Limited.

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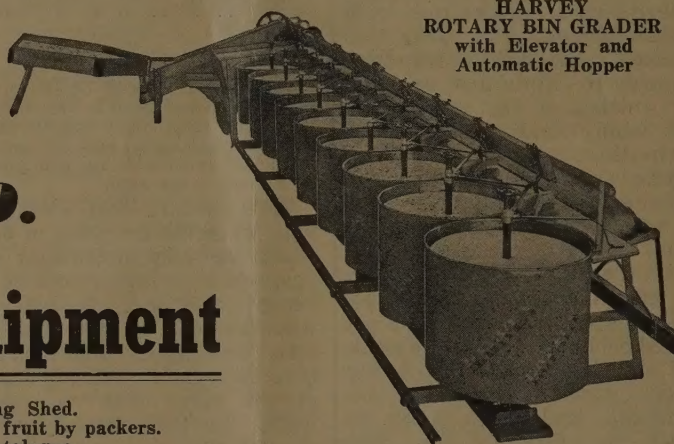
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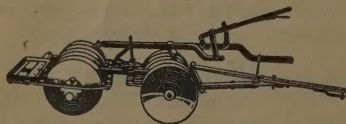
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## Orchardists' and Fruit Cool Stores Association of Victoria Annual Conference at Cowes

**T**HERE was a good attendance of members of the Orchardists' and Fruit Cool Stores Association of Victoria at the twenty-third Annual Conference, held at the Shire Hall, Cowes, Phillip Island, on May 29.

The first discussion took place on the

### New Award of the Fruit Packers' Board.

The President of the Association (Mr. W. P. Mair) was on the Committee dealing with it. It was stated that it was one of the most difficult of the Wages Board awards to "hammer out." The difficulty was to obtain a basis on which to work. Up till now there had been no award in the industry, and wages had been paid on unofficial ruling rates. However, the award has given a reasonable amount of satisfaction.

It will, of course, raise many problems in the industry, one of which will be the obtaining of ordinary orchard labor which up till the present time has been paid considerably less than the Wages Board rates for packers.

A resolution was passed requesting the Department of Agriculture to include representatives of the Association to the Cool Storage Space and Rates Advisory Committee.

### Control of Codling Moth and Woolly Aphis.

A resolution was passed: "That in view of the serious ravages of Codling Moth and Woolly Aphis in recent seasons, this conference requests the Horticultural Division of the Department of Agriculture to immediately conduct further research in an endeavour to obtain better means of controlling the diseases."

The question of Woolly Aphis was dealt with first, and it was stated that the parasite which had been introduced has not been effectively carrying out its work or the purpose for which it was introduced into the orchards, until too late in the season to be of value. This season Woolly Aphis has been particularly prevalent, and has caused considerable losses to growers.

The main complaint came from growers in the Southern and Peninsula districts. Further north where the weather was cooler (Harcourt district), it was stated that the parasite worked fairly well and had given a reasonable amount of assistance.

As far as the Codling Moth was concerned, the Harcourt district unofficially estimated that 200,000 cases of Apples and Pears had been lost. Up till January the pest had not given any serious cause for concern, but from then onwards a late infestation took place and losses were very serious.

A statement was made by experts from the Horticultural Division of the Department of Agriculture (Mr. F. M. Read and Mr. Gayford), that the methods recommended by the Department of Agriculture could scarcely be improved upon. The year had been favorable both for Woolly Aphis and Codling Moth. It was found that in some seasons as far as Woolly Aphis was concerned, the parasite would have considerable success, which may continue for a number of seasons on end, and then, either through a change of climatic conditions or for some other reason difficult to ascertain, it would prove less effective.

It was recommended that the parasite be persevered with and that sprays with oil also should be used.

As far as Codling Moth is concerned, it had been found that most growers sprayed regularly and effectively until the picking season commenced, and then they ceased spraying. This was admitted by most of those present, who said that owing to shortage of labor it had been found very difficult to continue with the usual spray schedules and the most urgent work had to receive first attention. Owing to the late Autumn, a second brood of Codling Moth was hatched, and this contributed largely to the trouble. World research had proved that lead arsenate spray and white oil could not be improved upon, but orchard sanitation was most important, and the use of chemical bandages was definitely worth while, but they must be regularly inspected.

It was therefore recommended that the present procedure be

carried out as formerly, but the timing of sprays was a most important means of reducing infection.

Thanks were expressed to Mr. Read and Mr. Gayford for the helpful information.

### Extending Activities of the Association.

A motion was moved "That in the opinion of this conference it was desirable to increase the activities of the Association to embrace all matters to improve the welfare of the fruitgrowers as a whole, particularly by the affiliation of fruitgrowers' associations."

It was felt that the Association was one of the few "live" organisations in the fruit industry. Up to the present it had specialised in cool store matters, and it was now felt advisable to extend its activities to include all sections of the industry.

The Association had a good basis for its finance, which is a difficulty with most other organisations, and on the framework already existing, it was felt that a good strong organisation could be built around the structure of this Association.

### Hail Insurance.

A resolution was passed that in the event of a further acquisition of the Apple and Pear crop, the Australian Apple and Pear Marketing Board be requested to investigate the possibility of a Commonwealth-wide scheme of insurance against hail damage.

Mr. W. P. Hutchinson, the Chairman of the Victorian Committee, stated after the matter had been introduced, that all States with the exception of Tasmania were favorable to a scheme of hail insurance, and he felt that it would be taken up wholeheartedly by the Board. Tasmania, however, desired an extension to cover losses by frost, and this matter would also receive sympathetic consideration by the Board.

### Compensation for Reworked or Grubbed Trees.

The next resolution was "That this conference request the State Government to make available funds to adequately compensate Apple and Pear growers to rework or grub out unwanted and unsatisfactory varieties of Apples and Pears."

When the 1941 scheme was being put to the Government, it was stated by Government representatives that they agreed that compensation should be paid for the re-working of unwanted varieties, but that owing to constitutional difficulties, this could not be done, and it was indicated that responsibility in this matter would rest with the State Government.

The payment of 1/- per tree on unwanted varieties, which may go on for a number of years, will cost a considerable amount of money, whereas a payment or compensation to assist growers in reworking or grubbing out these trees would be a better financial proposition than carrying on with the yearly payments, and in the long run would possibly cost a considerably smaller sum. In this connection, a suggestion was made that the Board should state much earlier next year what varieties were to be declared as "unwanted." Many good-paying early varieties were this year not required, and it was felt that considerable loss was caused to the growers.

There followed a discussion on the details of last year's scheme. A number of questions were answered by Mr. Hutchinson, and considerable help was given by him. A number of suggestions were made, which Mr. Hutchinson promised to pass on to the Board for their consideration.

No motion was taken on the question of the 1941-42 marketing plans, as it was felt that it would be unwise to do so until the result of the Parliamentary

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inquiry now being made, is known.

The following office-bearers were elected:—Mr. W. P. Mair was re-elected **President**; **Vice-Presidents**, Messrs. J. H. Lang and D. W. Lechte; **Executive Members**, Messrs. N. L. Whitten and A. D. Finger; **Secretary** and **Treasurer**, Mr. W. A. Stewart.

Luncheon was held at the Isle of Wight Hotel.

The following day delegates attending the conference were the guests of the Shire of Flinders, in a most enjoyable sight-seeing tour of the Island.

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## VICTORIAN YOUNG FARMERS CLUBS' ASSOCIATION.

### SCHOOL OF AGRICULTURE.

**A** SCHOOL OF AGRICULTURE course was organised by the Victorian Young Fruitgrowers' Association to enable school teachers and members of rural communities to acquire a knowledge of modern agricultural practice, and so to fit themselves better to further the interests of the Young Farmer Movement in the State. Sessions were held at the Boys' High School, South Yarra, Burnley Gardens and State Research Farm, Werribee.

The School was opened officially on May 19 by the Hon. the Deputy Premier and Minister for Lands and Forests (Hon. A. E. Lind, M.L.A.). At the Burnley Gardens, Mr. B. P. Krone

spoke on Tomato culture, Mr. F. J. Greatorex "Pruning, Budding and Grafting Fruit Trees," Mr. A. W. Jessep "Vegetable Culture." At other sessions the topics included "Garden Pests" and "Remedial Measures" (Mr. R. T. M. Pescott). Poultry management, pasture improvement, dairy farming, forestry, wheat production, bee-keeping, fertilizers, sheep management, etc. The course concluded on May 30.

### TARNAGULLA CLUB.

With poultry as its project, the club at Tarnagulla (Vic.) is making steady progress. The pen of Australorps is in the school grounds, and while some of the hens are moulting, others are back into lay. Preparations are being made for the coming breeding season. Culling is pro-

ceeding and pedigree birds have been distributed to keen members.

### FRUIT PACKING.

#### Success With Adult Classes in Victoria.

The Victorian Department of Agriculture anticipated that there would be a shortage of skilled fruit packers in the 1941 season, due to the war, marketing conditions, and the estimated heavy crop of Apples and Pears. To meet this shortage, it was decided to arrange packing classes for adults in as many fruit-growing centres as possible. The scheme was advertised widely, and 16 classes were held. Each class was of one week's duration, and the number of persons attending varied from 4 to 30. A total of 176 persons attended these classes, which were conducted by Messrs. Krone, Harris and Pearce. Of these 176 persons, 145 competent packers were provided for the industry.

The majority of the qualified packers accepted employment in various packing houses, while the remainder intended to pack their own fruit in the orchard, or supervise the packers on their own property.

In those districts where it was not possible for classes to be held, personal packing instruction was given by Departmental officers.

### BANANA GROWING IN N.S.W.

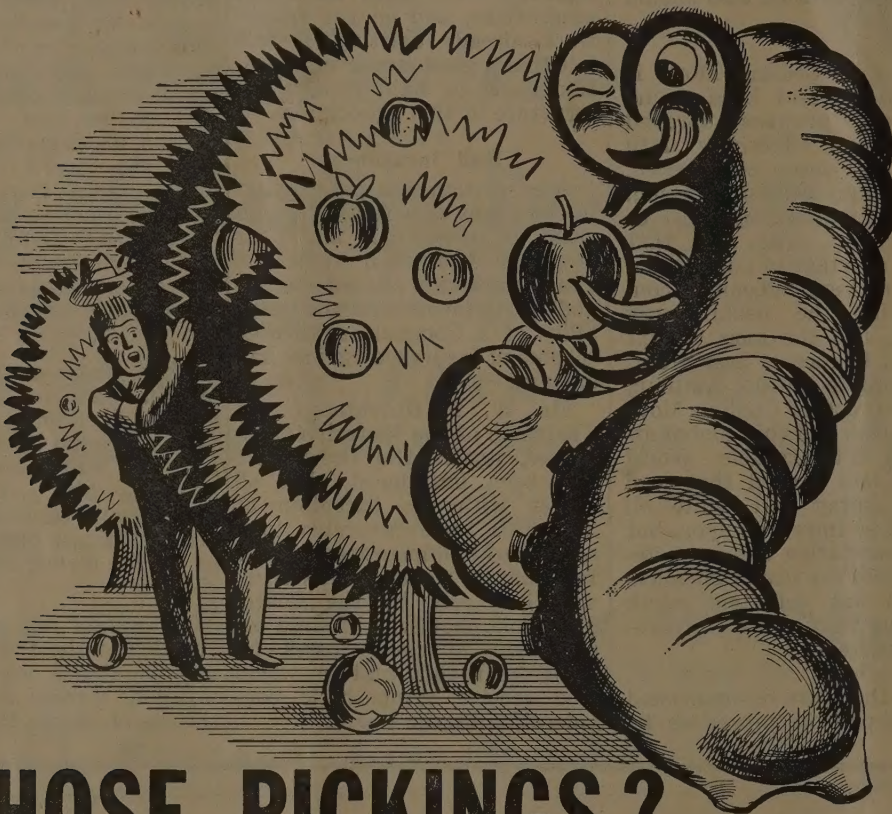
#### Danger of Over-Production.

That there is a danger of over-production of Bananas in N.S.W. is the opinion of Mr. C. G. Savage, Chief of the Division of Horticulture, N.S.W. Department of Agriculture. There are now 18,598 acres under cultivation, compared with 17,360 a year earlier. There are over 2,000 growers cultivating an acre and more, and 1,619 with less than an acre.

In the big year of 1935 the production was 1,250,000 cases, and this quantity added to the Bananas from Queensland brought prices to a very low level.

Mr. Savage directs attention to the possibility of the inroads of disease where methods of cultivation are not kept at a high level. Consideration should be given by growers in low production sections as to whether it is economical to attempt to maintain these.

Mr. W. P. Aylett, of the "Mango" Nurseries, Mangoplah, N.S.W., advises that in addition to growing thousands of fruit trees at his nurseries, he has a bed of 10,000 well-grown Almond trees all on Almond stock, clean and true to label. Mr. Aylett's catalogue, which contains lists of fruit trees, citrus, Grape vines, Roses, etc., is available post free on request.



## WHOSE PICKINGS? YOURS OR HIS!

Grubs, caterpillars, mites, red spiders, can be stopped before they start simply by preventing them from hatching out of their eggs. The finest egg-killing oil is Gargoyle RED—the oil that pioneered the oil-spray technique in Australia. Eggs laid in the crevices of the bark are smothered by the thin but deadly film of Gargoyle RED. It creeps on them in the deepest crannies. It effectively "cleans them up." It does more. It softens the bark and improves the health of the tree—a wonderful spraying oil that lives up to its fine reputation. Despite the national emergency it is obtainable as usual at all storekeepers, Fruit Growers Associations, and Vacuum Depots throughout Australia.

VACUUM OIL COMPANY PTY. LTD. (Incorp. in Australia)



# Gargoyle RED Spraying Oil



Fruit Packers' Wages

DETERMINATION OF WAGES BOARD IN VICTORIA NOW IN FORCE

FOLLOWING the activity of fruit packing employees, the Storemen and Packers' Union, in negotiating through the Victorian Fruit Marketing Association, the Orchardists and Fruit Cool Stores Association, and the Victorian Central Citrus Association, a Wages Board was formed.

Because of the difficulties in negotiating through the Storemen and Packers' Union and the Cold Storage Employees' Union, it was deemed advisable that a special Board be created to deal with the many intricate points associated with the fruit industry—hence the formation of the Fruit Packing Board.

Determination of the Fruit Packing Board.

Note: This Determination applies to the whole of the State of Victoria.

In accordance with the provisions of the Factories and Shops Acts the Wages Board appointed "to determine the lowest prices or rates which may be paid to any persons or classes of persons (other than persons engaged in wholesale fruit stores within the metropolitan district) employed—

(a) in the process, trade, business, or occupation of preparing, storing, or packing fruit for trade or sale;

(b) in cool stores (exclusively engaged in the cold storage of fruit) attached to any establishment where fruit only is prepared, stored, or packed for trade or sale"—

has made the following Determination, namely:—

(1) That this Determination shall come into force and be operative on and after the 1st May, 1941.

(2) WAGES PER WEEK OF 44 HOURS.

Improvers.	Citrus		Other	
	Fruit Packing Establishments.		Establishments.*	
	Males.	Females.	Males.	Females.
Under 16 years of age	20 9	20 9	20 9	20 9
16 to 17 years of age	26 9	26 9	26 9	26 9
17 to 18 years of age	33 6	30 3	33 6	30 3
18 to 19 years of age	46 6	45 0	46 6	35 9
19 to 20 years of age	60 0	48 6	60 0	39 6
20 to 21 years of age	73 8	53 9	73 8	44 9

\*Provided that any improver engaged in packing fruit shall be paid the adult weekly wage or piecework prices.

Proportion (in any Place). One improver to every two or fraction of two workers receiving not less than the minimum wage.

Males.		Other Employees.	
	s. d.		s. d.
Packers of citrus fruits	95 0		
Packers of fruits other than citrus fruits	112 0		
Full cool store hands (i.e., persons who are engaged for at least 75 per cent. of their time each week in cool store chambers)	108 0		
Persons bringing fruit from and putting fruit into cool store chambers	99 0		
Case ladders and nailers—machine	102 0		
Case ladders and nailers—hand	94 0		
Case wirers	94 0		
All others	89 0		
Females.			
Persons employed in citrus fruit packing establishments	60 0		
Packers of fruits other than citrus fruits	112 0		
All others	50 9		

Note: The Board determines that no person shall be employed as an apprentice.

(3) Piecework Prices: The lowest piecework prices payable for the following kinds of work shall be:—

Pears.		Per Case.	
	d.		d.
Bench packing—			
Wrapping and packing unsized Pears into any standard bushel case, including lidding	5½		
Wrapping and packing unsized Pears into any standard bushel case, no lidding	4		
Packing naked Pears into any standard bushel case, including lidding	4½		
Packing naked Pears into any standard bushel case, no lidding	4		
Packing Pears into market flats, no lidding	5½		
Provided that where fruit has been accurately sized into quarters prior to being packed the rates set out for unsized bench packing may be reduced by ½d. per case.			
Other packing—			
Wrapping and packing Pears off sizing machine into any standard bushel case	3½		
Wrapping and packing or packing naked unsized Pears into any standard bushel case, no lidding	4		
Wrapping and packing or packing naked sized Pears into any standard bushel case, no lidding	3½		
Wiping—			
Wiping Pears by hand	4		
		Any Standard Bushel Case.	Full Pines.
Grading and sizing—			
Grading and sizing into quarters and placing loose in cases, no lidding	3	3½	5
Grading and sizing into two size groups and placing loose in cases, no lidding	3	3½	5
Grading (no sizing) and placing loose in cases, no lidding	3	3½	5

Apples.		Per Case.	
	d.		d.
Bench packing—			
Wrapping and packing unsized Apples into any standard bushel case, including lidding	5½		
Packing unsized naked Apples into any standard bushel case, including lidding	4½		
Packing unsized naked Apples into any standard bushel case, no lidding	4		
Packing unsized naked Apples into full pine cases	6		
(1) That this Determination shall come into force and be operative on and after the 1st May, 1941.			
Provided that where fruit has been accurately sized into quarters prior to being packed the rates set out for unsized bench packing may be reduced by ½d. per case.			
Other packing—			
Wrapping and packing Apples off sizing machine into any standard bushel case	3½		
Wrapping and packing or packing naked sized Apples into any standard bushel case, no lidding	3½		
Wrapping and packing or packing naked unsized Apples into any standard bushel case, no lidding	3½		
Wiping—			
Wiping Apples by hand	3		
		Any Standard Bushel Case.	Full Pines.
Grading and sizing—			
Grading and sizing into quarters and placing loose in cases, no lidding	3	3½	5
Grading and sizing into two size groups and placing loose in cases, no lidding	3	3½	5
Grading and sizing into quarters and packing naked into cases for cool storage, no lidding	4	4½	6

Plums.		Per Half Case.	
	d.		d.
Wrapping and packing or packing naked Plums, no lidding			
Wrapping and packing or packing naked Plums which includes bringing out of and putting into cool store, bringing to and taking away from bench, lidding, branding, and/or labelling			

Lemons.		Per Case.	
	d.		d.
Packed within 30-mile radius of General Post Office, Melbourne—			
Wrapping and packing Lemons into any standard bushel case, including lidding, branding, and/or labelling			
Packing naked Lemons into any standard bushel case			
Packed outside 30-mile radius of General Post Office, Melbourne—			
Wrapping and packing Lemons into any standard bushel case			
Packing naked Lemons into any standard bushel case			

Oranges and Mandarins.		Per 1,000 Oranges or Mandarins.	
	s. d.		s. d.
Wrapping and packing Oranges or Mandarins			
Packing naked Oranges or Mandarins			

(4) Wiring: Where a pieceworker is called on to wire cases he shall be paid ½d. per case for all cases wired.

(5) Conditions of Piecework: (a) All of the rates set out under Bench Packing, in Clause (3), include bringing the fruit to and taking away from bench, bringing fruit out from and putting fruit into cool stores (such fruit not to contain more than 10 per cent. rejects), branding, and/or labelling, attaching, and marking stickers.

(b) No pieceworker shall be called upon to pack more than one grade of fruit at a time. All fruit put out, rejects or otherwise, in excess of 10 per cent. of the number of bushel cases of naked fruit handled shall be paid for at the rate of ½d. per case.

(c) Pieceworkers shall not be entitled to overtime rates for piecework done outside times of beginning and ending work.

(6) Times of Beginning and Ending Work: On Monday to Friday inclusive—Times of beginning not earlier than 7 a.m., times of ending not later than 6 p.m.

On Saturday—Times of beginning not earlier than 7 a.m., times of ending not later than 12.30 p.m.

(7) Overtime: The following rates shall be paid for all work done:—

Outside the times of beginning and ending work as fixed in Clause (6)—Time and a half.

Within the times of beginning and ending work, in excess of 44 hours in any week—Time and a half.

(8) Terms of Engagement: (a) Employees are to be engaged as weekly or casual employees. A weekly employee is one engaged by the week and paid by the week, and whose engagement shall be terminable by one week's notice on either side, such notice not to be continued from week to week.

(b) After one full week's work, such notice may be given to a weekly employee at any time, but an employer may pay one week's wages in lieu of notice.

(c) Casual employees shall be guaranteed not less than two hours' engagement every start.


(d) A weekly employee to be entitled to the weekly wage shall be available, ready, and willing to perform his or her usual work during the days and hours usually worked by such class of employee, and may be summarily dismissed for dishonesty, misconduct, neglect of duty, or for



No gambling with Goodman's. They thrive when transplanted and grow the finest fruit. Apples, Apricots, Cherries, Pears, Plums, Nectarines, Peaches.

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Picnic Point Nurseries, Bairnsdale, Vic.





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**ENGLISH MODEL**—Several to choose from. Water bath air cleaner, 4.3 top gear, high tension magneto with impulse starter, fly ball governor, steel wheels with grips or pneumatic tyres.

**CORK MODEL**—Water bath air cleaner, 4.3 top gear, high tension magneto with impulse starter, fly ball governor, steel wheels with grips or pneumatic tyres.

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my Nurseries are not only growing Iris and Bulbous Plants.

I have thousands of fruit trees in hundreds of varieties, grafted on stocks to suit any climate south of Brisbane. I have been bred amongst the Nurseries and Orchards in the "Riverina" district and should know the best varieties to suit all clients.

I have no agents.

My Catalogue is Free, it contains special varieties (only) in Fruit Trees, Citrus Trees, Grape Vines and Roses, and in its pages will be seen Collections made up of fruit trees to suit all pockets.

**W. P. AYLETT**  
The "Mango" Nurseries and  
Iris Gardens,  
(Phone 25) Mangoplah, N.S.W.



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THE A.M.P. Society has prepared six folders and booklets for those young men and women who want to get ahead financially; who want to strengthen themselves so that they and their families may be prosperous and secure.

These six folders are named in the coupon below. Put a cross against those you wish to read (we suggest that you put a cross against all six) and send the coupon to the nearest A.M.P. office. Reading the folders may give you a new outlook on life and its opportunities. You could not spend a twopenny stamp in a more fruitful way. Send the coupon to-day.

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Please send me the folders marked with a cross in the squares below. It is understood that I put myself under no obligation by sending for these folders. They are absolutely free.

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- ☐ Buying money.
- ☐ Life Assurance V. other investments.
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- ☐ What are your brains worth?
- ☐ Peace of mind.

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District Offices throughout all States.

New Zealand Office: Customhouse Quay, Wellington.

days observed as New Year's Day, Australia Day, Good Friday, Easter Monday, Labor Day, Anzac Day, King's Birthday, Christmas Day, and Boxing Day.

All employees working on piecework shall be granted the following holidays: Christmas Day, Good Friday and Anzac Day, and they shall be paid for such holidays the amount for each holiday based on the minimum weekly wage as set out in this Determination for the class of work performed.

(12) Time Book or Other Record: Every employee shall indelibly record daily his or her correct time of beginning and ending work in a book, or on time cards, or by a mechanical contrivance, which shall be furnished by the employer.

(13) Right of Entry of Union Official: A duly accredited representative of the Federated Storemen and Packers' Union of Australia shall have the right to enter employers' establishments for the purpose of interviewing employees on legitimate union business on the following conditions:—

(a) That he produces his authority to the employer or his representative.

(b) That not more than one representative in all be in any establishment at any one time.

(c) That no one representative visit an establishment more than once a fortnight.

absence from work without reasonable cause, and in the event of such dismissal the employee shall be paid only for the time actually worked.

(e) Where an employer is not satisfied as to the reason of an employee absenting himself or herself from work, the employer may deduct from the wages of such employee the time he or she has been so absent unless the absence of an employee who has had at least three months' service with such employer was due to sickness, in which case the employer shall make no deduction for such sickness, provided that an employee shall not be entitled to payment for non-attendance on the ground of sickness for more than four days in each year.

(9) Casual Work: Casual work, i.e., work for less than two full weeks, shall be paid for at the following rates:—

Adult male employees, 2/6 per hour.

Other employees: Ordinary wages rate with an addition of thirty-three and one-third per centum.

(10) Special Rates for Sundays and Public Holidays: Pieceworkers shall be paid rate and one-quarter, and all other employees double time for all work done on Sunday, New Year's Day, Australia Day, Good Friday, Easter Monday, Labor Day, Anzac Day, King's Birthday, Christmas Day and Boxing Day; but if any other day be by Act of Parliament or Proclamation substituted for any of the above-named holidays the special rate shall only be payable for work done on the days so substituted.

(11) Holidays: Weekly employees shall be granted the following holidays without deduction of pay: The

(d) That if an employer alleges that a representative is unduly interfering with his establishment or is creating disaffection amongst his employees or is offensive in his methods or is committing a breach of any of the previous conditions, such employer may refuse the right of entry, but the representative shall have the right to bring such refusal before the Wages Board.

R. J. EDWARDS, Chairman.  
J. R. MACPHERSON, Secretary.  
Melbourne, March 19, 1941.

Members of the Fruit Packing Board are: Messrs. R. J. Edwards (chairman), F. Moore, K. Weeding and D. J. Walters (representing the employers); Messrs. A. A. Kyle, S. Brown and Eric Lovell (representing the employees). The Secretary is Mr. J. R. McPherson.

A full report of the proceedings at the Wages Board meetings was presented by Messrs. Moore and Weeding to a meeting of representatives of the Victorian Fruit Marketing Association and the Orchardists and Cool Stores' Association on May 6, at the C.T.A., Melbourne.

Mr. W. P. Hutchinson presided and there were also present Messrs. W. P. Mair, F. Petty, H. J. Noonan, and R. E. Boardman.

The Wages Board delegates were cordially thanked for their services.

#### AUSTRALIAN WORKERS' UNION FRUITGROWERS' AWARD.

The rates payable under (1) (2) (3) and (4) of Table A will, for the current quarter, be as follows:—

	Engaged by the week. Per week.	Engaged by the hour. Per week.
(1) In those parts of N.S.W. and in Victoria situated within 20 miles from the Chief Post Office at Mildura, including the districts of Mildura, Irymple, Merbein, Redcliffs, Wentworth and Curlew, in the Renmark and other irrigation settlements in S. Australia situated on or near the River Murray and in the Murrumbidgee district, N.S.W., including Leeton—		
(a) Adult males . . . . .	£ 4 6 0	s. 1 10½
(b) Female of 18 years of age or more . . . . .	2 17 4	1 2½
(2) In all other parts of New South Wales—		
(a) Adult males . . . . .	4 5 0	1 10½
(b) Females of 18 years of age or more . . . . .	2 16 4	1 2½
(3) In all other parts of Victoria—		
(a) Adult males . . . . .	4 4 0	1 9½
(b) Females of 18 years of age or more . . . . .	2 15 10	1 2½
(4) In all other parts of South Australia—		
(a) Adult males . . . . .	4 2 0	1 9½
(b) Females of 18 years of age or more . . . . .	2 14 4	1 2½

The special rates payable under Sub-Clause (b) of Table B are as follows:

1. Employees engaged fumigating citrus trees . . . . . 2 2

#### PRUNE DEHYDRATORS—YOUNG DISTRICT, N.S.W.

	Per Hour.
2. Leading hand on grader . . . . .	1 11½
3. Grader hands . . . . .	1 11
4. Leading hand drier . . . . .	2 0½
5. General hands . . . . .	1 11

#### CHERRY PICKING.

6. Per basket of 60 lbs. . . . .	2 9
----------------------------------	-----

#### CITRUS FRUIT TREES

Late Valencia, Navel, Sweet Rind Lemon, Rough Skin Seville, Imperial Mandarin, Emperor Mandarin.

Interstate—£50 per 1,000 F.O.R., £47/10/- 2,000 lots, £45 3,000 or over.

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Phone: The Slopes 2Y — **KURRAJONG, N.S.W.**



# Apple and Pear Board Enquiry

## COMMITTEE OF ENQUIRY.

### Evidence in Queensland.

Mr. L. C. Dobbie, "Ecclebourne" Orchard, Cotton Vale, Qld., writes under date May 15 and sending a copy of the Stanthorpe "Border Post" of May 2, concluding with these remarks: "Witnesses were unanimous that while some form of control is necessary, maladministration has greatly marred the success of the 1941 scheme."

The following are a few extracts from the press report:

Mr. J. B. Ferris, when asked if he had an alternative scheme said that they might eliminate the lower grades compulsorily and pay the growers a bonus on that which could not be sold.

Evidence was given by Messrs. H. E. Phillips, F. W. Lancaster, D. Pfrunder, L. C. Dobbie, J. K. Archer, D. G. T. Gow, H. St. John Pratt (Dept. of Agriculture).

Instances were given where improved methods of administration were needed. It was also stated that the difference between "fancy" and "good" grade was too much. The difference was 2/6 and it was suggested this should be 1/- or 1/6 at the outside. It was stated the Apple production of the Stanthorpe district was about 240,000 bushels in an ordinary year. A complaint was made that the private consumer trade which, prior to acquisition, disposed of more than 30 per cent. of the Queensland crop had been greatly reduced. Queensland should be exempted from acquisition until the end of March. The grouping of varieties was stated to require re-adjustment.

Another witness recommended that acquisition of Stanthorpe fruit should not commence before February 1. It was stated that acquisition on the whole had been a success and the majority of growers were behind it, but in the administration some growers had been subjected to vexatious restrictions.

### Evidence in Victoria.

When the Committee of Inquiry sat in Melbourne, Mr. Abraham Silk said that acquisition was a national matter and the trade was putting its whole weight behind the Apple and Pear Board. He considered the retail prices were very reasonable. He also considered that 7½ per cent. commission was too low: it should be 10 per cent.

Mr. H. J. Davis said that the 1941 plan was better than that of 1940. Several improved methods of procedure were put forward.

Mr. C. Mawdsley, Secretary, Melbourne and Metropolitan Retail Fruiterers' Association, said that although his organisation had carried a resolution opposing the Board he understood

from members that they were more satisfied this year than last.

Several other fruiterers gave evidence. Some complained of more wastage than in the pre-war period; others favored selling by count instead of by weight. The necessity for a control plan was acknowledged.

Mr. J. G. Aird, orchardist and cool store supervisor for the Board, said he was convinced that some form of marketing control was essential, otherwise there would be unmanageable gluts.

:: :: ::

The Committee visited Tasmania towards the end of May and will subsequently visit Western Australia and South Australia, and also take further evidence in Victoria in fruitgrowing districts.

## HIGH COURT CASE.

**A**RGUMENT was heard in the High Court on the subject of Apple and Pear Acquisition in mid-May before Sir George Rich (Acting Chief Justice) and Justices Starke, Dixon and McTiernan.

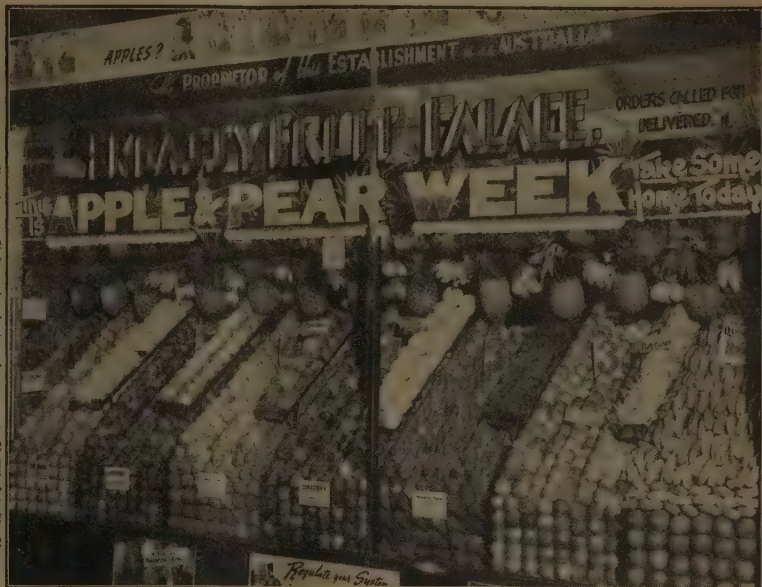
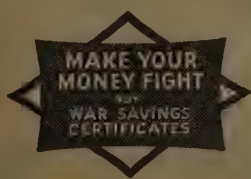
Mr. R. R. Sholl appeared on behalf of Geoffrey Basil Andrews, orchardist, of Wantirna, Vic., who asked the Court to review a decision of Mr. R. H. Beers, P.M., in the City Court. Mr. Beers found that by removing 27 cases of Apples acquired by the Commonwealth and which were in his possession, Andrews had contravened the regulations. Mr. Beers fined him £3, with £2 costs. Andrews then obtained an order nisi to review the decision.

Contending that the Apple and Pear Acquisition regulations were a violation of the Commonwealth constitution, Mr. Sholl attacked the scheme.

Mr. Ham, K.C., addressed the Court on behalf of the Commonwealth Government, and the Apple and Pear Board, stating that the Apple and Pear growers had lost their export markets as a result of the war, and that as a war measure the Acquisition regulations were justified.

Continuing, Mr. Ham said that if the fruit industry was allowed to perish, great destruction of property would be involved in chopping down the orchards, because the growers would not be able to pay for spraying trees.

Judgment was reserved.



The Embassy Fruit Palace, Malvern, Victoria, which received the award for best display in the window and shop dressing competition recently conducted by the Apple and Pear Marketing Board.

## APPLE AND PEAR MARKETING.

### Growers Favor Continuance of Acquisition.

At a meeting of representative fruitgrowers from various parts of the State held on May 22, at the Commercial Travelers' Association, Melbourne, Mr. G. W. Brown presided.

A resolution was unanimously carried favoring a continuance of the Apple and Pear Acquisition plan for the duration of the war.

The chairman stated he had evidence that a majority of fruitgrowers in the State favored the present control system.

Messrs. W. P. Mair and J. K. Lillywhite (Tyabb), said that from 80 per cent. to 90 per cent. of the growers on the Mornington Peninsula favored acquisition. Delegates from Portland, Gippsland, the Goulburn Valley and other areas spoke in similar terms.

Mr. W. Young, Ardmona, said that the Northern Victoria Fruitgrowers' Association, comprising over 700 growers, was unanimously in favor of the present plan. The Apple and Pear Board had tackled a colossal task and was performing good service. Improved methods of procedure were constantly being evolved.

## APPLE WEEKS.

May 5 ushered in Apple Week in Melbourne, when the city shops of all kinds were decorated with gay baskets of Apples and Pears. Several shops generously provided their whole windows for the week. Cookery demonstrations were conducted; there were series of broadcasts by doctors, dentists and others.

This event, which was inaugurated six years ago, is a great stimulant to sales, and assists in educating the public about the varieties, as the contents of the baskets are labelled.

A competition was held among fruit retailers for the best display

of Apples and Pears in the shop windows and interior of the shop. Results: — First: Embassy Fruit Palace, 233 Glenferrie-road, Malvern (£10/10/-). Second: A. J. Brown & Son, Nicholson-street, Footscray (£5). Consolation and Special Prize: A. J. Brown & Son, 83 Charles-street, Footscray (£5). Consolation Prizes: J. Oberman, 570 Burke-road, Camberwell (£1); F. Costa, 646 High-street, East Kew (£1); H. V. Comley, 1025 Burke-road, Hawthorn (£1); V. Ziino, 407 Centre-road, Bentleigh (£1).

Adelaide held its Apple Week from April 21, and Western Australia from May 2 to 9. Apple Week will be held in Sydney from June 27 to July 4.

## APPLE BLOSSOM FESTIVAL.

An Apple Blossom Festival was held at Wenatchee, Wash., U.S.A., in the Spring of this year, when the Valley's 2,000,000 trees were in bloom.

There was a Queen Carnival, and 35,000 people attended the function.

— THE —

# BAVE-U

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All models can be fitted with pneumatic tyres at little extra cost.

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## N.S.W. DRIED FRUITS BOARD.

The semi-annual meeting of the N.S.W. Dried Fruits Board was held in Sydney on May 14. There was a full attendance of members.

The Board's estimates of receipts and expenditure for 1941 were considered, and it was noted that possibly the original estimates of production will not be realised owing to the seasonal conditions which have intervened since the estimates were made. In view of this, the initial estimates of receipts will be reduced. It was, however, thought that by continuing strict economy and with the subsidy granted to the N.S.W. Board by the Victorian Board towards the cost of policing illegal traffic in dried fruits in N.S.W. and Queensland, it will not be necessary to call upon the financial reserves of the N.S.W. Board to a greater extent than was at first anticipated.

Figures showing the estimated production in Australia of each variety of dried tree fruits for the 1941 season; the quantities required for Service purposes; the residues which will be available for ordinary trading on the Australian market and the normal annual consumption in Australia, were examined, and as a result it was decided to recommend to the Consultative Committee that the existing statutory home consumption quotas for dried Peaches, dried Apricots and dried Pears be revised. It seemed clear that these quotas should be increased.

With regard to dried Prunes, it was noted that the existing home consumption quota has already been fixed at 100 per centum.

### Inspection of Dried Fruits in Queensland.

The Board's Inspector, Mr. C. N. Hall, has been appointed as an Inspector under Queensland

legislation which authorised him to make inspections of dried fruits in Queensland. It was decided that Mr. Hall should visit Queensland at an early date. Means of transport for the Inspector to and in Queensland were considered, and instructions were issued by which strict economy in this connection will be exercised.

### Further Plantings of Vines for the Production of Dried Fruits.

A report was presented to the Board giving a resumé of the result of recent deputations to the authorities, and of correspondence conducted in this connection.

The Board noted that the New South Wales Minister for Agriculture (Major A. D. Reid) had stated that the State of New South Wales was adhering to the "gentleman's agreement," and would continue to honor it, provided the other States did likewise, and that the Premier of Victoria, Mr. Dunstan, had intimated that his Government was strongly in favor of maintaining a cautious policy, with uniformity throughout Australia, and believes that there should be no extension of production in the dried vine fruits industry, unless world conditions fully justified an increase.

### PRUNE BREAD.

One use suggested for surplus or discard Prunes is to use them in bread. Prune bread was inspected by members of the Dried Fruits Board recently at the William Angliss Food Trades School in Melbourne and reported great satisfaction with the product. The Prune moisture permeates the whole of the bread, giving it a popular flavor and a nice brown color. After further experiments recipes for making the bread will be distributed and commercial manufacture is expected to follow when the public tries the new sample.

# Western Australia

## APPLE BY-PRODUCTS.

### Dehydration in W.A.

### Apples Also Used for Juice, Canning, and Pulping.

Arrangements have now been completed for the dehydration of from 25,000 to 30,000 bushels of Apples, which it is thought will produce 90 to 100 tons of dried Apple rings.

This statement was made early in May by Mr. R. M. Carter, Superintendent in W.A. of the Apple and Pear Marketing Board.

The arrangements have been concluded with the drying factory controlled by Mr. A. G. Watt, of Greenmount.

"It should be noted," said Mr. Carter, "that normal yearly production of dried Apples throughout Australia has in the past been approximately 500 tons; but it is anticipated that in view of the call from overseas forces, this year it will be expanded to 1,000 tons."

The type of fruit being used is a lower grade than that which would normally be packed into boxes for commercial sale.

Continuing, Mr. Carter said that considerable quantities of Apples for factory use had been supplied to factories for juice extraction, pulping and canning.

### APPLE WEEK IN W.A.

Apple Week in Perth was held from May 2 to 9.

During that time, restaurants and other caterers made a special feature of Apple dishes on their menus.

A shop window dressing competition was conducted, and the results were:—Chas. Moore &

Co., 1st in "A" Section for the best display of Apples; W. J. Lucas Ltd., winner of the "B" Section for the best tie-up between Apples and other goods displayed; and Mr. R. Thompson, of East Fremantle, who won the trophy in the Special Section for the best small city and suburban retailers' display.

Western Australia reports that Apple Week in Perth was most successful, and proved a great impetus to sales.

### BLACK SPOT DISCUSSED AT MANJIMUP (W.A.).

More than 30 fruitgrowers met at Manjimup (W.A.) recently to consider the serious difficulties faced by those growers whose orchards have been affected by Black Spot.

Mr. A. Fontanini stressed the need for localising the danger.

Mr. Walter Douglas said the growers could not bear the burden any longer, and looked to the State Government for relief.

Mr. J. F. Kammann suggested a levy of one-eighth or a fourth of a penny per case to form a fund to assist growers fighting Black Spot, and he moved "That this meeting recommends the Executive to consider ways and means to re-establish the trust funds revenue."

The motion was carried.

### PREPARING THE LAND.

#### Planting Deciduous Trees.

IN THE PREPARATION of the land for planting fruit trees, sub-soiling is desirable, although not absolutely necessary, provided the land can be, and is, ploughed to a sufficient depth. Should there, however, be a hard pan under the surface soil then subsoiling is necessary, for, if it is not done, the trees may suffer severely from "wet feet."

A disc plough is, generally, the most satisfactory implement to use; and, if it is not set to cut too wide a furrow, it can be made to plough 18 inches deep.

When preparing land for fruit trees, care should be taken to remove, as far as possible, all roots and stumps, even though they be below plough depth, in order to prevent, or at least to reduce to a minimum, the risk of attack by the root fungus *armillaria mellea* which, although primarily one of Nature's scavengers and feeds on dead roots, yet it can—and so often does—leave the decaying roots and fasten on to the live roots of fruit trees with disastrous results. It is almost impossible to save the tree once the fungus has become firmly established.

# ARE YOU

# GRUBBING?

Previous experience had convinced me that to be really efficient a grubbing machine should have ample power and ropes that will meet the heavy demands required of them. I found that shovel and axe work is very costly either by itself or in conjunction with a machine. The machine that offered these features with a host of others, was **THE "MONKEY" GRUBBER.**

It gave me the power of 260 pairs of hands in a simple and compact form; the lever is short, so that I am able to stand firm-footed and get the full stroke. There are two speeds in the machine, as well as an automatic release that allows me to let off a strain, or as the machine will work in any position, it comes in for all jobs that would require a chain block. It is taken to the job on a pair of wheels like a barn truck, and is rigged for work in a few minutes. The ropes are in lengths that I find easy to handle, and each one is fitted with hook and loop couplings, so simple and absolutely IT for effectiveness. The makers have included a sturdy snatch block with a novel method of securing to the ropes, and also a fine type of firm gripping rope shortener. The latter makes it very easy to accommodate the lengths of rope to the tree or stump being pulled, and is quickly released from the rope. The combination of so many time and labor saving features makes the "Monkey" Grubber a superior grubbing outfit.

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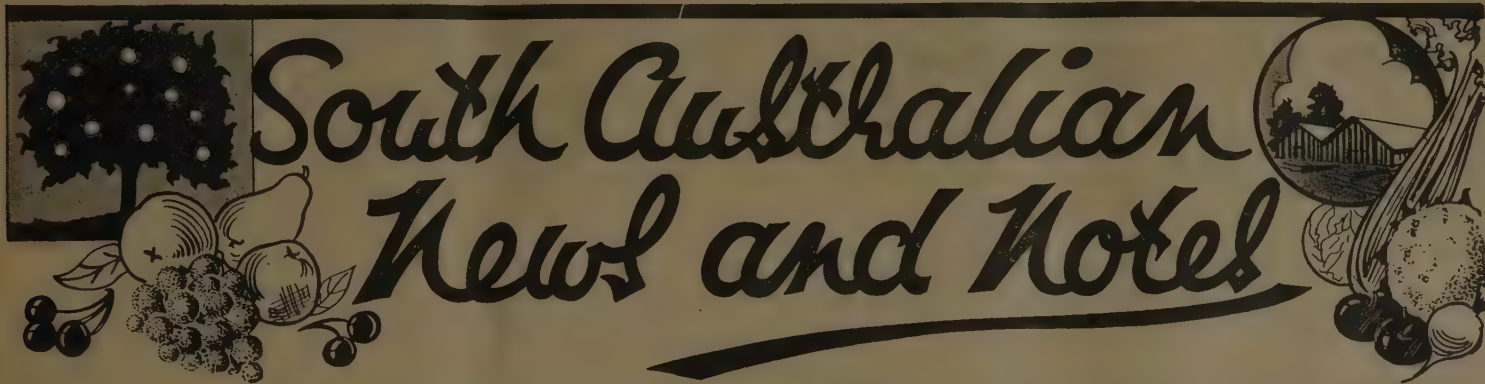
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Official Reports and Notes of the South Australian Fruitgrowers' and Market Gardeners' Association

## S.A. Fruitgrowers and Market Gardeners' Association Incorp.

### MEETING OF EXECUTIVE COMMITTEE.

**T**HE Executive Committee of the above Association met in the Board Room, 288a Rundle-street, Adelaide, on May 30, 1941, at 10.30 a.m.

**Present:** Mr. H. N. Wicks (Chairman), Messrs. W. Wye, J. D. Yeatman, B. Schapel, L. B. Pfeiffer, W. H. Ind, J. Turner, O. Esselbach, F. A. Wicks, R. Hunter, H. B. Robson, L. J. Wicks, G. H. Schultz, R. G. Hannaford, W. G. McLaren, J. B. Randell, D. W. Hannaford, A. O. Peterson, H. W. Parsons, A. C. Cramond, A. Morecom, J. P. Kerber, C. H. Ragless, E. W. Nitschke, C. W. Giles, W. J. Bishop, C. J. Pitt, and A. G. Strickland (Chief Horticulturist).

**Apologies:** Messrs. N. T. Hobbs, C. Stanford, M. Packer, N. Edwards, F. Hughes.

Minutes read and confirmed.

**Correspondence:** Letters received from: (1) Minister of Agriculture; (2) Kuitpo Colony Inc.; (3) Department of Horticulture.

Resolved "That the Association donate £1/1/- towards the Kuitpo Colony Appeal."

#### Sectional and Branch Reports.

**Potato Section:** Mr. C. Pitt reported that he did not attend the recent meeting of Federal Potato Advisory Committee in Brisbane, but had since received a copy of the proceedings. A point which required consideration was the proposal to effect

an Australian-wide scheme for the stabilisation of prices. Messrs. L. B. Pfeiffer and E. W. Nitschke, of the Onkaparinga Potato Branch, reported that the matter of price stabilisation was receiving consideration by the Branch, and had decided on a local scheme. The Branch sought the approval and support of the Executive in its efforts.

Mr. W. J. Bishop moved "That the Association give all support to the Onkaparinga Potato Branch in its efforts to improve the Potato position in South Australia."

Seconded Mr. O. Essalbach. Carried.

**Celery:** The Secretary, in apologising for the absence of the Celery Chairman (Mr. M. Packer), stated that the Celery export season was progressing favorably. Transport and crates had caused concern, but the efforts of the Organiser (Mr. R. G. Bartram) had successfully overcome the transport problem.

**Citrus:** Mr. O. Essalbach stated that at the moment there was very little to report except that citrus quantities on the market were increasing.

**Marion Branch:** Mr. H. W. Parsons reported that the Branch had been faced with a problem for cracking Almonds, but had provided a new means for cracking which had proved successful. Any Association

## Bearing of Young Brandis Almond Trees

At the Agricultural Bureau Conference at Kadina the Weavers Branch asked:—"At what age should Brandis Almonds start bearing, and are there any methods to induce a tree which is making strong growth to bear?"

In reply, the Chief Horticulturist (Mr. A. G. Strickland) stated that the first crop is often taken off young Almond trees in the second year from planting, but very early cropping, such as this, usually results from poor growth. Heavy blossoming is not to be expected if the trees are growing strongly until the third or fourth season. Earlier cropping is, in fact, undesirable, as a heavy crop borne while the tree is small delays growth and tends to limit the ultimate size attained by the tree, and hence its bearing capacity. Heavy cropping of young trees, therefore, is generally to be regarded with suspicion. If conditions are favorable, young trees should be forming their framework with strong growth. The formation of prolific fruiting wood comes at a later stage, when growth is steadying down.

A few blossoms occur on very young trees, of course, and often quite a considerable showing of blossom is seen on the young trees in the Spring after planting from blossom buds formed in the nursery. Whether this blossom and the light blossom of the first few seasons sets fruit depends on the thoroughness of pollination. Many of our Almond varieties are nearly self-sterile, and will not set freely unless they receive pollen from other varieties. In young plantings, therefore, although one variety may be flowering freely, little fruit is set until other pollinator varieties also start blossoming and provide the necessary pollen for cross-fertilization. — "S.A. Journal of Agriculture."

## INSURANCE

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A. STUART, Secretary,  
F. & M.G. Society Ltd.

member requiring assistance with Almond cracking was asked to contact the Branch.

**Fruitgrowers' Society Ltd.:** Mr. W. J. Bishop reported that the trading Society was now making rapid progressive steps.

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## The South Australian Fruit Marketing Association, Inc.

### GROWERS' SUB-COMMITTEE

**M**INUTES of monthly meeting of members held at Adelaide on May 30, 1941, at 1.45 p.m.

Present: Messrs. R. G. Hannaford, H. N. Wicks, A. O. Petersen, A. G. Strickland, R. A. Cramond, R. O. Knappstein, S. M. James, D. W. Hannaford, C. L. Winsor, R. B. Pritchard, M. G. Vickers, A. Brealey, R. H. A. Lewis.

Mr. S. M. James, Acting Chairman, occupied the chair.

Address by Mr. H. N. Wicks:

Mr. Wicks gave an interesting address, his subject being "Study of Incompatibility of Stock and Scion."

He said that this was probably the most neglected section of propagation in fruit tree nursery practice, but that it probably had a greater bearing in quality and production than any other factor.

The types of stocks used in nursery work shows that the easy course has been adopted and has been the basis for a number of years, but this was the only course possible, as it would take too long for a nurseryman to check up on affinity of stock and scion in the

hundreds of varieties catalogued in the ordinary commercial nursery, and would not be practicable.

A great deal of the research work has been rendered useless owing to the changes in common orchard practice.

Information was given in regard to cuttings, layers, root grafts and seedlings.

Mr. Wicks answered numerous questions put to him, growers stating what had happened with experiments in their various districts.

Mr. R. A. Cramond proposed a vote of thanks to the speaker, which was seconded by Mr. R. B. Pritchard and carried.

### EXECUTIVE COMMITTEE

**M**INUTES of monthly meeting of members held at Adelaide on May 30, 1941, at 2.45 p.m.

Present: Messrs. R. G. Hannaford, R. O. Knappstein, D. W. Hannaford, H. N. Wicks, R. B. Pritchard, M. G. Basey, A. O. Petersen, S. M. James, J. B. Randell, A. G. Strickland, C. L. Winsor, A. Brealey, R. A. Cramond, M. G. Vickers, W. W. Miller, L. J. Bishop, G. S. Queale, L. G. Heading, F. Rowley, R. H. A. Lewis.

Apologies were received from Messrs. P. R. B. Searcy, J. H. Dunning, A. R. Willsmore.

The President, Mr. J. B. Randell, occupied the chair.

**Correspondence:** The President read letter dated May 6 received from the "Joint Parliamentary Committee on the Apple and Pear Acquisition Scheme," in reply to letter from this Association.

The matter was discussed and Mr. M. G. Basey moved a resolution:—

"That the matter be held in abeyance until word is received as to when the Committee is coming, then a full Executive Committee meeting to be called prior to the meeting of the Joint Committee."

Seconded by Mr. A. O. Petersen and carried.

Letter dated May 19 from Mr. G. A. W. Pope, accepting the honorary life membership of the Association and thanking members for their expressions of goodwill.

### THE SOUTH AUSTRALIAN FRUIT MARKETING ASSOCIATION INC.

The June meetings of the Association will be held at the Secretary's office, 83-4 Brookman Buildings, Grenfell-street, Adelaide, on Friday, June 27, 1941.

Growers' Sub-Committee commencing at 1.45 p.m. Speaker: Mr. A. G. Strickland, Chief Horticulturist. Subject: "Primary Asco Spores."

Executive Committee meeting will commence at 2.45 p.m.

E. WHITFIELD MILLS, Secretary.

Planting Time is Here again !

## Fruit Trees

GOOD STOCKS OF PRIME YEARLING TREES IN:—

**ALMONDS**

(on Almond)

**APRICOTS**

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**Cling PEACHES**

**NECTARINES**

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All other general lines including

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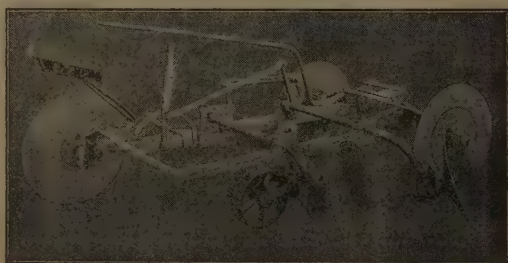
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A sturdy, strong plow equipped with reversible discs to enable the operator to plow up to, or away from the trees. Operated by a single lever and with nothing to catch branches of trees. To facilitate the movement of the plow around the orchard the discs are movable and lift clear of the ground.

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Preliminary considerations of proposals re co-operation with South Australian Fruit Growers' and Market Gardeners' Association was deferred until the next meeting.

**Growers' Sub-Committee:** Mr. James reported that at the growers' meeting Mr. Wicks gave an address on "The Study of Incompatibility of Stock and Scion."

**1942 Crop Manpower:** Mr. Basey said that as things are at present they could not ask that men be exempt from military duties and consideration should be given as to how next season's harvest could be handled in a reasonable fashion. He suggested that womanpower should be introduced.

Mr. Randell stated that the situation was becoming more difficult, and he was glad the subject had been brought up.

The matter was then discussed by members, and on the motion of Mr. Basey the following resolution was put to the meeting:—

"That a special meeting of the Executive Committee be called to consider the question of manpower for carrying on of orchard operations for the 1942 season, together with proposals that will be submitted to the Joint Parliamentary Committee on the Apple and Pear Acquisition Scheme."

This was carried.

The meeting to be held on Friday, June 6, at 2 p.m.

Notice of meeting to be sent to all members of the Executive Committee.

### N.S.W. CITRUS CROP.

In a recent review of the citrus crop conditions in N.S.W. the Chief of the Division of Marketing (Mr. A. A. Watson) stated that Navels were developing and coloring nicely, and that Valencias were also filling well. Crops are expected to derive considerable benefit from recent rains.

In inland districts crops appear to be on the light side, but the size and quality are pleasing.



# Potato Virus Diseases, The Scientist and the Farmer

(By J. G. Bald, Research Officer, C.S.I.R.)

THE experience and viewpoint of farmers has been, even in a scientific age, as valuable in the betterment of agriculture as anything the scientist has done. In the control of virus diseases of Potatoes, it was the farming community that first proposed and tried the methods that are now used. When scientists discovered the cause of these diseases, and how they are spread in the field, they could at the time do little more than say certain methods were correct and give reasons why. They discredited methods that were not correct, improved and systematised the choice of suitable areas for growing seed crops, and the detection and eradication of diseased plants from the growing crops. They erected the standards for certification schemes, which have revolutionised the growing of Potatoes in many countries.

Just as there are details in agricultural practice that a farmer knows, and that equip him to grow crops when and where untrained men would fail, so there are details of knowledge and method which enable scientists to discover what farmers cannot. After finding out reasons for the practical steps farmers had taken to preserve their Potato crops from degeneration, scientific workers went further in their investigations than the most observant and ingenious practical men could go. The results of their work suggested several new methods by which Potato stocks might be freed further from infection with virus diseases. These methods old and new will be described in a later article; here something will be said about the nature and effects of virus diseases.

The word "virus" originally meant poison, but it came to mean a poison that apparently had some of the attributes of living things, e.g., it could multiply in the body of an animal or plant, and cause diseases. Long after bacteria and fungi that produce disease had been isolated and examined under the microscope, viruses still eluded all efforts to separate them entirely from the tissues of the plant (or animal) in which they caused disease, and to examine them separately. This was partly because they would not multiply, and in many instances would not long remain active, outside the living tissues of their host plant (or animal). They were finally isolated by chemical means, and millions of virus particles were aggregated to form minute quantities of powder or crystals, that could actually be seen and handled. In this

form, viruses proved to be no more striking in appearance than common salt, but latent in them were still powers that were once thought to be the attributes only of fully organised living things.

The viruses that cause diseases in plants have several means of spreading in the field. The two means by which Potato viruses are spread are insects, mainly the Peach and Rose Aphides, and the rubbing together of diseased and healthy plants as they are blown in the wind. The viruses transmitted by Aphides, of which three are of major importance in Australia, are not transmitted by contact and rubbing, and the one important virus which is transmitted by contact is not transmitted by Aphides.

Throughout most Potato growing areas, these sorts of virus are by far the most important, but a virus disease of a third sort, Tomato Spotted Wilt, is common in restricted localities. Spotted Wilt will be discussed towards the end of this article, because it is important in the Adelaide Plains, and the Mount Lofty Ranges.

Between the two main sorts of viruses are other points of difference. Those transmitted by Aphids produce symptoms that are fairly easy to see. Two cause what are called mosaic diseases and what many farmers call crinkle, or curly and crinkly tops. The leaves may be mottled as well as crinkled and distorted. Under hot, dry conditions, the symptoms may be milder, sometimes so mild as to be almost non-existent. This reduction in symptoms does not mean that the virus has died out in the infected plant; it is still active, and causes a reduction in vigor and yield.

The third Aphis-transmitted virus is leaf roll; the name is a very good description of the disease. The edges of the leaves roll upwards. The effects of leaf roll can be distinguished fairly well from the rolling caused by soil and weather conditions, and some other diseases, by the fact that mainly the lower leaves are rolled, that these leaves are thick, harsh and leathery in texture, and often areas of the leaf between the veins or along the edges are killed. An infected plant is generally a good deal smaller than neighbouring healthy plants.

Thus, from the farmer's point of view, there are two sorts of virus disease which may be observed in the average crop (leaving Tomato Spotted Wilt out of account): mosaic, causing mottled, curly, or crinkly tops, and leaf roll. These are the dis-

eases that certification schemes are mainly designed to control.

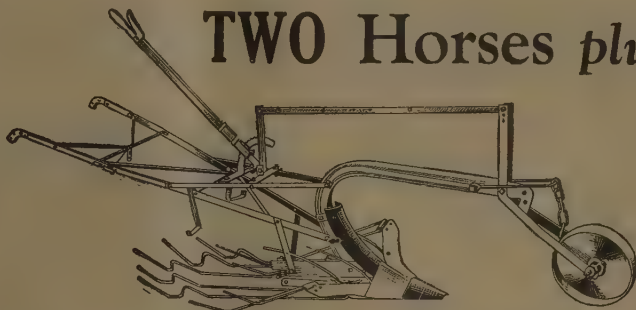
Crops may be found almost free from mosaic and leaf roll, occasionally one is found in which every plant is infected; but most crops lie in between these extremes. During the 1937-1938 season, an inspection of farms on the Adelaide Plains and in the Mount Lofty Ranges and the Hindmarsh area showed that 63 per cent. of plants in crops of the variety Carmen examined were infected with these virus diseases. Most of the farmers were not aware how widespread and serious infection was. Once informed, many of them cleaned up their stocks or obtained better stocks from elsewhere, and when, two years later another inspection was made, the improvement was very striking.

The one important virus that is transmitted by contact was a number of years ago named Virus X, an appropriate name,

for it is present, without being noticeable, in the vast majority of the plants of all the most commonly grown Potato varieties in Australia. It is not quite true to say that it does not produce symptoms; its symptoms may sometimes approach in intensity the mildest types caused by the Aphis-transmitted mosaic diseases. Generally, however, an infected plant on inspection would be classified as healthy. The absence of symptoms does not mean that the disease is harmless, it decreases the yield by something like 20 per cent. When it is considered that such losses occur in nearly all crops throughout Australia, it will be understood that the unobtrusiveness of Virus X is its greatest danger. On the other hand, if Potato stocks are kept free from other viruses the losses will remain at about the same level year after year; the disease will not become more severe. Thus the policy of con-

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Kramm, L. W. . . . .	Hahndorf
Braendler, E. E. . . . .	Echunga
Smith, J. W. . . . .	Echunga
Paech, A. W. . . . .	Lobethal
Altmann, F. A. . . . .	Balhamnah
Hanna, G. . . . .	Forrestone
Liebelt, C. E. . . . .	Mt. Barker Junction
Schubert, A. L. . . . .	Echunga
Mangelsdorf, A. M. . . . .	Woodside
Schulz, E. . . . .	Charleston
Potts, G. . . . .	Charleston
Stephenson, W. T. . . . .	Mt. Barker
Altmann, W. A. . . . .	Oakbank
Wuttke, H. . . . .	Oakbank
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### SELLING APPLES BY THE COUNT.

The selling of Apples by the count instead of by weight was strongly urged before the Committee of Inquiry by Mr. C. Mawdsley, Secretary of the Melbourne and Metropolitan Fruiterers' Association. He advocated legislation for the adoption of this method as 35 per cent. of the retailers were Italians, and they did not readily absorb new methods.

trolling mosaic and leaf roll by certification, and for the time being (but not finally) discounting Virus X is perfectly sound. Until something can be done about Virus X the fact that it affects all growers alike makes the loss it causes bearable. Because of it, farmers must put more work and more money into the production of the Potato crop than they would in its absence, and the community as a whole must pay more for its Potatoes, and possibly eat less.

Although the methods of transmission in the field differ for these two groups of viruses,

they are alike in that once a plant is thoroughly infected, its progeny, grown year after year from tubers, will always be infected. The virus of Spotted Wilt does not persist in the tubers to the same degree. This disease is carried by Thrips; it spreads through an infected plant with some difficulty, but where it gets into young growing tissues, it causes collapse and death. It kills back shoots from the tip, and produces dead spots on the leaves which often take the form of concentric rings. It passes into the tubers, and if they are young when it enters them, it causes dead spots in the tissues and cracking and distortion as the unaffected portions of the tuber continue to grow.

For the control of Spotted Wilt, an essential point that has not yet been determined is how often tubers from infected plants will produce infected plants when they are used for seed. It is known that often when tubers containing the virus are planted, shoots that begin to emerge are killed back before they reach the surface of the soil, and the seed tuber misses. But it is possible that diseased plants develop from tubers containing the virus often enough

to make the planting of seed from heavily infected crops dangerous, and until there is sufficient evidence on this point final rules about the use of seed from crops infected with Spotted Wilt cannot be framed.

(To Be Continued.)

### OSLO LUNCH DIET.

#### Value of Wholesome Food, also Fruits.

The Opportunity Club for Boys and Girls, in Collingwood, near Melbourne, Victoria, has carried out an Oslo Lunch Diet experiment, with under-nourished girls and boys. The tests were made under the attention of Dr. Ramsay Mailer, on 1,000 children for six months.

There were five groups each receiving some variation of what has come to be accepted as the standard diet.

An enquiry was conducted in the homes as to the morning, midday, and evening meals. All revealed lack of essential vitamins and body building foods. There was a shortage of butter, cheese, milk, vegetables and fruit. The great weakness was in the midday meals when children had white bread sandwiches, meat pies, pastry or fish and chips.

It was therefore on the midday meal on which the investigators determined to concentrate.

Tests were made separately using Oranges as the only fruit or Apples as the only fruit.

Summed up, the best results were obtained by the following lunch:—

3 slices wholemeal bread, butter, cheese,  $\frac{1}{2}$  pint milk.  $\frac{1}{2}$  oz. Wheatarts (a Vitamin B<sub>1</sub> preparation), and an Apple.

It is emphasised that the bread must be genuine wholemeal, and not a colored substitute.

The children gained in weight, and in mental alertness.

The Apple, besides its vitamins and mineral salts, provides "roughage" for assisting bowel action.

The investigating Committee reports on the value of Oranges, Pineapples, Tomatoes, Lettuce, etc.

The aim was to discover the most nourishing lunch at the lowest possible cost.

It is pointed out that children should receive at least a pint of milk every day: further that the Oslo diet is suitable for people of all ages.

:: :: ::

It is believed that by correct, wholesome, balanced diet, children can develop normally. The recommended diet is low in cost, yet fully nutritious. Much money is at present wasted by many people on unwholesome foodstuffs.

The Oranges are being supplied to the Opportunity Club by the Victorian Central Citrus Association, and the Apples by the Apple and Pear Marketing Board.

Similar tests are being conducted in New South Wales.

### ORDERS WITHIN SEVEN DAYS FROM ADVERTISEMENT IN "FRUIT WORLD AND MARKET GROWER."

Mile End, Adelaide, S.A.  
May 16, 1941.

The Advertising Manager,  
"Fruit World and Market Grower,"  
Melbourne.

Dear Sir,

With reference to our recent advertisement in your Journal, issue April 5, we thought you would be interested to learn that in less than seven days after your paper was issued we had telegraphed orders for two units from Tasmania, and enquiries from Victoria, as well as from several districts in our own State of South Australia, and we therefore take this opportunity of expressing our appreciation of the rapid and favorable results which your journal afforded us here.

Yours faithfully,  
HORWOOD BAGSHAW  
LIMITED.  
(Signed) H. R. Horwood,  
Sales Director.

## Citrus Notes

### GERMANY PURCHASES SPANISH ORANGES.

Germany has agreed to purchase about half of the Spanish exportable surplus of Oranges this year, states the U.S.A. official publication, "Foreign Crops and Markets."

There will be 7,783,000 boxes of Oranges and 1,260,000 boxes of Mandarins shipped to Germany. Payment for the fruit is to be accepted by Spain in the form of credits to be used later for the purchase of German merchandise.

Last season the United Kingdom was by far the most important purchaser of Spanish Oranges. Indications are that the British Government also is negotiating for the purchase of Spanish fruit.

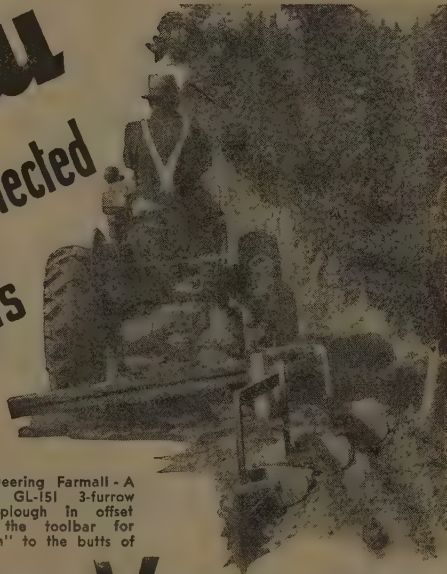
### FIELD DAY AT MERBEIN.

An interesting field day was held at the citrus grove of Capt. D. B. Halhed, Merbein, Vic., on May 13. Dr. Joan Hearman, of the Griffith Research Station, was in attendance. She answered many questions.

The visitor explained the various phases of her work, and encouraged information relative to citrus stock trees which have proved their longevity, and the location of any additional plantings from such proved stock. This information will aid her in the work of determining root stocks suitable for Australian conditions.

## M'CORMICK-DEERING

**New**  
**Toolbar-connected**  
**Implements**



McCormick - Deering Farmall - A tractor with GL-151 3-furrow mouldboard plough in offset position on the toolbar for ploughing "on" to the butts of the trees.

## for ORCHARD-VINEYARD

The advanced design of the rubber-tyred McCormick-Deering Farmall-A tractor — THE TRACTOR WITH "FRONT-END" pull — provides the foundation for the mounting of a unique toolbar and lifting device to which can be attached a complete set of toolbar-connected ploughing, cultivating and disc-harrowing implements which set a new high standard of high-speed field-working efficiency and ease of control for vineyard and orchard operations.

A demonstration can be arranged on your own property without obligation to you. Ask your nearest McCormick-Deering agent for full particulars.

M'CORMICK - DEERING TOOL-BAR-CONNECTED IMPLEMENTS can be set in any desired position on the toolbar for offset or ordinary work. They can be controlled from the operator's seat by conveniently placed levers for depth control and levelling and for raising the implement well clear of the ground to facilitate turning on short headlands. Farmall-A and its toolbar-connected implements are priced economically for the smallest orchard or vineyard.

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# Production of Vegetable Seeds

(By N. R. Quinn, Assistant Horticultural Adviser, in the S.A.  
"Journal of Agriculture.")

THE United Kingdom and other parts of the British Empire have, in the past, drawn a large proportion of their vegetable seed supplies from the European Continent and other non-sterling countries. Many of these sources are now cut off, and it is necessary to conserve non-sterling exchange for the purchase of munitions and essential war supplies. Reliable growers who will undertake the production of vegetable seed within the Empire are therefore needed urgently.

There is at present unparalleled opportunity for experienced vegetable growers to establish a new and profitable industry in South Australia, and, at the same time, to render valuable service to the State and to the Empire as a whole. If reliable sources of vegetable seed supply can be built up within this country, not only will our own and Britain's immediate urgent need ensure a large and hungry market for everything that can be produced, but the vegetable growing industry of Australia will reap permanent benefit in the form of close supplies of fresh seed from known sources.

The industry also will be freed substantially from the ever-present danger of introduction of new pests and disease, a danger which is not entirely avoidable where there is importation of seed from overseas. Even the most stringent inspection and quarantine regulations have not prevented the appearance of diseases new to this country. Growers will without difficulty recall the first appearance of various pests in the last few years, and will realise how the necessity of combating such troubles has raised the costs of production.

Vegetable seed production is not an undertaking which can be entered into lightly, however. We are fortunately situated in that already we have many suitable strains and varieties, and, starting with such material, it is possible by careful selection and roguing of the seed crop, and taking care to see that the strain is not contaminated—by cross pollination, for instance—to maintain such strains in a high state of pro-

ductivity. This is already being done in this State by many Celery and Tomato growers. Unremitting care and attention are required, however, and without such care all hope of building up an industry would disappear; unreliable seed can have no market, and certainly such seed will not supply the present need of the United Kingdom.

For the experienced vegetable grower the production of vegetable seed is not a difficult task, and, in most instances, can be undertaken without heavy capital expenditure on harvesting machinery. Many types of vegetable seed can be cleaned and dressed with the simplest equipment, and although the final dressing on a large scale of seed of some varieties does require more elaborate machinery, these processes are the function of the seed merchant and need not deter the grower from undertaking seed production.

The first step in vegetable seed production is the raising of a good crop of vegetables, planted at the season in which weather suitable for ripening and harvesting the seed crop may be expected as the seed reaches maturity. Varieties liable to cross pollination must be planted where danger of contamination from other plants is unlikely. This point is considered again later in more detail, and is all-important in raising seed of Cabbages, Cauliflowers, and other crucifers.

As the crop matures, roguing is necessary to eliminate types which are unsuitable. Careful and heavy roguing is necessary if the character of strain is to be maintained, and it is here that experience is necessary, for the seed grower must be able to recognise desirable types and must have the courage to discard all but the most suitable plants from among the seed parents. This process does not lead to loss, however, as the rogued plants may be marketed as fresh vegetables.

The final harvesting and seed-cleaning methods vary considerably with the type of vegetable under crop. In the following columns various vegetables have been grouped in accordance with the methods of seed production.

## Carrots and Parsnips.

Seed of Carrots and Parsnips may be sown during August, September, and October in shallow drills 18 in. to 24 in. apart and then covered lightly with soil. When the seed has germinated the young plants are thinned to approximately 4 in. apart in the row. Parsnip seed germinates very slowly.



Freshford Gem Walnut tree at eleven years of age, carrying a heavy crop of quality nuts at the nursery of Mr. L. J. Wicks, Highbury East, S.A.

**Soil:** Loam, light clay loam, and alluvial silt. Avoid gravelly soils, as they cause misshapen roots.

**Locality:** The Carrot does well over a wide range of territory. It crosses readily with the Wild Carrot, and care must be taken to see that this is not likely to occur. The Parsnip prefers a cool climate, although it is possible to acclimatise strains to warm localities.

**Fertilizer:** The amount to be used will depend on the nature of the soil and its previous cropping. As a general rule, 4 cwt. of sulphate of ammonia and 8 cwt. of super. worked deeply into the soil a week or two prior to sowing the seed should prove adequate.

**Cultivation:** A deeply worked soil prior to planting. All weeds must be suppressed and the soil kept worked down finely between the rows.

**Seed Production:** The roots reach maturity during the early Autumn or Winter, and when selecting the desirable types for seed production a plough furrow is opened up as close to the roots as possible. The roots are then inspected, undesirable types culled, and the remainder thinned out to 8 in. apart in the row. This method may be adopted in localities where severe frosts are not experienced. In districts where roots cannot be over-wintered in the soil they are removed and stored until they are replanted during the late Winter or early Spring. Roots that are selected for seed production must be true to the variety and free from "forking," thin in the core, with a well-developed cortex or outer portion surrounding the core. An idea of the thickness of the cortex may be obtained by cutting a few of the apparently ideal types. When the roots are removed for Winter storage, the tops are removed carefully so that the bud is not damaged, and the roots then stored in sacks in a relatively moist room. When replanting, the roots are placed in a furrow and covered firmly with soil, leaving only the bud exposed, the seed being formed the following Summer. When the bulk of the seed is ripe, which stage is shown by the drying of the seed stalks in the case of Carrots and the separation of the 2 seeds in

Parsnips, the crop is harvested. The seed heads are cut and their drying completed on sheets exposed to the sun. When the heads are thoroughly dry the seed is threshed out, care being taken to see that the stalks are not broken up finely, as they are then difficult to separate. The seed is cleaned by rubbing it over sieves and blowing off light material. Parsnip seed has an exceptionally short life, and it is not considered economic to sow seed that is more than 12 months old.

## Onion.

Onion seed is sown in prepared seed beds during the early Autumn and Winter. When the seedlings are approximately 6 in. high they are transplanted into the field in rows 18 in. apart and 6 in. apart in the row. When planting out care must be taken not to plant too deeply; only the roots and a very small portion of the stem should be buried. Placing the soil firmly around the seedlings is very important.

**Locality:** The Onion prefers a cool, moist climate during the growing period with warm, dry weather for the maturing and seeding period.

**Soil:** The soil types most suitable are those of a well-drained, friable nature with a fairly high lime content.

**Fertilizer:** A good dressing of stable manure, deeply worked into the soil 4 or 5 weeks prior to planting. Super. is broadcast over the area at the rate of 4 cwt. to 6 cwt. per acre and cultivated into the soil just prior to planting out.

**Cultivation:** The soil should be deeply ploughed and worked down to a fine tilth prior to planting. After planting, all weeds must be suppressed and the surface kept loose.

**Seed Production:** On reaching maturity, the bulbs are pulled from the soil, those that do not conform with the strain being marketed, and the remainder, to be saved for seed, stored at a constant temperature of 45 deg. F. The storage temperature plays an important part in the amount of seed produced the following season. Early in the following Spring these mother bulbs are planted out into the field, the soil of which has been





cultivated and manured with super. only, in a similar manner to that recommended for the original seedlings. The bulbs are planted root downwards in drills 30 in. to 36 in. apart sufficiently deep just to cover the Onions, which are spaced 8 in. apart, centre to centre. As the plant grows in height, the soil is pulled up to the seed stalks to support them.

**Harvesting:** The correct time to gather the seed is when it has reached the dough stage; the seed darkens early, but this is no indication of maturity. The first gathering of the seed takes place just prior to the seed falling. The head is cut with a short piece of stalk and placed in a picking bag and later spread on sheets and dried in the sun. Two or three pickings may be necessary. The seed is threshed out roughly on the drying sheets, the coarser portions of stalks raked off, and the remainder poured into water. The heavy first-grade seed settles to the bottom, the chaff and lighter seed is skimmed off, and the seed is dried immediately. The lighter seed may be used for thick sowing, such as for Spring or pickling Onions.

Onion seed must be stored under dry conditions or it will quickly lose its vitality.

#### Leguminous Crops.

**Garden Pea** seed is sown through the Autumn and Winter and into the Spring when comparatively cool Summers are experienced. The seed is drilled into rows 12 in. to 24 in. apart and 3 in. to 4 in. apart in the row, according to the variety.

**Broad Beans** are sown in the Autumn in two rows 12 in. to 15 in. apart. These two rows have a space of 24 in. on either side to assist with the picking. The seeds are placed 4 in. to 6 in. apart in the row and 2 in. to 3 in. deep in the drill. If the crop is to be grown entirely for seed the rows may be spaced 18 in. apart.

**Dwarf or French Beans** are sown from September to December in rows 18 in. to 24 in. apart and 4 in. apart in the row, and not more than 2 in. in depth.

**Runner or Climbing Beans** are sown from September to December in rows 3 ft. to 4 ft. apart and 6 in. to 8 in. apart in

the row, and not more than 2 in. in depth.

**Navy or Pea Beans** are sown from October to December in rows 30 in. apart and 4 in. apart in the row, and about 1 in. in depth.

**Soil:** Peas and Broad Beans prefer well-drained, clay loams with a fairly high lime content. Dwarf, Climbing, and Navy Beans do well in sandy loams. The soils should be deeply worked prior to sowing and allowed to settle into a firm seed-bed.

**Fertilizer:** The Broad Bean responds to an organic fertilizer worked into the soil prior to planting, but other legumes are inclined to grow too rankly and not produce satisfactory crops. All Beans and Peas respond to base dressings of super., 3 cwt. to 4 cwt. of which should be broadcast and worked into the soil shortly before planting; 1 cwt. to 2 cwt. of sulphate of ammonia may be used as a top-dressing if the young plants require stimulating. Climbing Beans are either trained on tall stakes or strings attached to an overhead wire. The latter method of training is the most economical way of gathering the whole of the plant when it is grown for seed production.

**Gathering Seed:** The whole of the plant is cut just prior to the haulm becoming dead ripe and is left in the field to cure. The seed is then threshed out. Beans and Peas are cross-pollinated to a degree, and if these two legumes are grown near other strains there is always the possibility of the varieties crossing.

#### Cauliflower and Cabbage.

Cauliflowers, Cabbages, Radishes, Turnips, Kale, and Kohl Rabi readily cross-pollinate with each other, and a distance of at least 1 mile should separate the plots when these cruciferous plants are grown for seed production. Cauliflower seed is sown in a well-prepared seed-bed from November to March. Cabbage seed is sown from March to November. The seedlings are transplanted into the field when they are approximately 6 in. to 8 in. in height. Cauliflowers are planted in rows 3 ft. apart and from 30 in. to 36 in. apart in the row. Cab-

bage are planted in rows 30 in. to 36 in. apart and from 18 in. to 24 in. apart in the row, according to the vigor of the variety. If the weather is warm and dry during the planting period, the young plants will require watering immediately.

**Soil:** Deep loams or clay loams are the most desirable soil types, as the lighter soils dry out more readily, with the possibility of the plants receiving a growth check, which is most undesirable.

**Fertilizer:** 10 to 15 tons of stable manure should be worked deeply into the soil a few weeks prior to planting; 6 cwt. to 8 cwt. of super. is broadcast and worked into the soil shortly before setting out the young plants. If stable manure is not procurable,  $\frac{1}{2}$  a ton of blood and bone manure may be added to the super. dressing. The plants must be kept growing vigorously up to maturity, and dressings of 2 cwt. to 3 cwt. of sulphate of ammonia may be necessary.

**Seed Production:** Cauliflowers and Cabbages normally require 3 to 4 months to reach maturity from the time they are planted out into the field. When planted solely for seed production, the crop must be so arranged that it will reach maturity in early Spring and the seed will develop and ripen during the Summer months. On reaching maturity, the crop is inspected closely, and all heads that do not conform with the strain are removed. Desirable characteristics in Cauliflowers are a well-formed curd that has developed right around underneath towards the stem. The foliage should be fairly dense and forming a protecting covering to the curd. Heads with leaves developing through the curd should not be saved for seed. Seed stalks will develop from stumps that are left in the soil, but greater yields are obtained if the heads are not removed and the seed stalks are allowed to develop in the natural way.

Cabbages that are to be saved for seed purposes should have well-formed, firm, compact heads. The development of the seed stalk can be encouraged by cutting the top of the Cabbage cross-wise, fairly deep, and tearing the sections apart with the fingers. The seed is harvested when the pods have reached maturity and show signs of shattering. The pods are then dried thoroughly and the seed threshed out.

#### Cross Pollination.

Emphasis must be laid on the danger of cross pollination,

particularly with the crucifers Cabbage, Cauliflowers, and Brussels Sprouts, Radish, Turnip, Kale, and Kohl Rabi, also with Carrot and Parsnip, and less so with the Bean or Pea varieties. It is very difficult to prevent cross pollination of crucifers. Any and all of those grown commercially interpollinate freely, and as the pollen is prolifically produced and is wind borne, a distance of at least 1 mile must separate seed crops of cruciferous vegetables. Nothing can destroy the character and value of a strain of seed more rapidly than this single factor, as the characters of the many varieties differ so very markedly that usually quite useless types arise from indiscriminate crossing. Cabbages with Kale characteristics, Cauliflowers behaving like Brussels Sprouts, and suchlike useless abortive types are common unless due precautions are taken. On a small scale and always when strain improvement by breeding is being undertaken, cross pollination is prevented by bagging the heads during flowering with either light cloth or paper. On a large scale this is rarely practicable. There are, however, many gardens in South Australia with the required degree of isolation to make seed raising of these crops possible. Without this isolation all thought of seed production of crucifers must be abandoned unless single-plant bagging is employed. To undertake cruciferous seed raising without bagging, therefore, the garden must be isolated; attention must be confined to the one variety and the one type of crucifer as far as seed is concerned; and finally the garden must be kept clear of cruciferous weeds and stumps of other related crops which are likely to flower and provide foreign pollen. The same remarks apply to the Carrot and Parsnip, which again are largely wind-pollinated.

In the case of Bean and Pea varieties, although these plants are cross pollinated, the danger is not nearly so acute, and a reasonable degree of separation is sufficient. Different varieties must not, however, be grown adjacent to each other or trouble will arise. Even with the Bean and Pea it would probably be best for each grower to confine his attention to the one variety, as, apart from other considerations, handling costs will be cheaper with a large quantity of the one seed type. There will be little danger of seed getting mixed, and undivided attention will be possible.

## THRIFT IS THE ARTIFICER OF FORTUNE

Thrift is just saving, not alone by the accumulation of money, but by the wise spending of it, and saving is just commonsense. The majority of incomes are modest, so the majority of people must plan, either for unusually heavy purchases, or for the eventual establishment of a competence. The majority of people obviously realise this, and use the best, most practical system of all, the Savings Bank account. It costs nothing, holds your money safe while paying interest, and releases it to you whenever and wherever you may require it.

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# Goulburn Valley [Victoria] News and Notes

PRUNING TIME — GOOD RESPONSE TO WAR LOAN — TINPLATE BOARD FORMED — PEACH PACK INCREASED — FALL IN PRODUCTION OF CANNED PEARS AND APRICOTS.

(By Our Special Correspondent.)

**E**XCEPTIONALLY DRY weather conditions have been experienced in the Goulburn Valley district and over all Northern Victoria during the last two months. Pastures have dried off, feed for stock has become scarce, and cropping operations have been held up for want of moisture in the soil. Pressed Lucerne from irrigated areas is in keen demand, and is being distributed throughout the dry area.

At the time of writing these notes a steady rain has set in, and it would appear that a welcome break in the weather has set in; up to two inches of rain is badly needed.

Pruning throughout the Goulburn Valley is now in full swing, but great difficulty is being felt in obtaining experienced men to do the work, as so many of our finest young men have already enlisted, and are already in the fighting front overseas, while many other workers have left the district for the metropolis, and are engaged in munitions work and other industries, where higher wages prevail than is possible in the rural industries. In fact, primary production is facing an acute labor shortage, and something will have to be done in the near future to prevent the continued drift to the cities.

**Bud development in Peaches, Pears and Apricots are quite satisfactory** for next year's crop, and with factories cleared of present stocks, another good season is anticipated.

## War Loan.

The recent War Loan was well subscribed to throughout the Goulburn Valley.

At Shepparton more than £25,000 was raised at the recent war rally. Mr. Allen McDonald, M.H.R., was the chief speaker, and urged all possible support for the loan, the money for which would be used to equip and mechanise the overseas forces. With Mr. J. G. B. McDonald, M.L.A., on the platform, the money started to pour in. The telephone rang continuously announcing contributions from all over the districts, and there was loud applause when each contribution was acknowledged by Mr. McDonald. In a little over an hour £19,000 had been subscribed, which was a splendid effort.

The Shepparton Cannery headed the list with a contribution of £4,000; there were also many other contributions of £1,000, including one from a local Jewish community.

At the War Loan Rally at Tatura £12,025 was subscribed by 67 applicants. Based on the

population of Tatura, which is 1,400, this constitutes an Australian record, according to Mr. E. Leeson, of the War Savings Committee, who was present.

While at Kyabram a sum of £7,435 was subscribed, which combined with the amount raised some months ago, brings the aggregate to £23,000.

## Empire Day.

Empire Day in Shepparton was a memorable one, with a large procession and pageant, where all branches of the military service were represented. Never before in the history of Shepparton has such patriotism been seen at the Empire Day procession and concert. The President of the British Empire Society addressed a large audience which filled the Star Theatre to overflowing, and by amplifiers his message of warning reached several hundreds more who waited in Fryers-street.

## Tinplate Shortage.

### Supplies from America.

A threatened shortage of tinplate for the processing of the 1941-42 crop is the latest problem confronting the canned fruits industry. A member of the industry has reported that practically no tinplate is now coming from England. It was hoped to secure supplies from America, but at present it was uncertain how much could be obtained. Reserved stocks of tinplate held in Australia by the fruit canning and jam industries were inadequate for their needs for next season.

It is known that canneries are watching the position very closely and with some anxiety. It is understood there is a fairly considerable volume of canned fruits and jams being exported to the Middle East. The balance of the 350,000 cases ordered by the British Government has been cleared, and a start has been made on the export of the 1940-41 pack. Further, it has been announced that a Tinplate Board has been formed.

Appointment of a Commonwealth Tinplate Board to control overseas purchases and the distribution in Australia was announced by the Minister of Supply (Senator McBride). The Board will consist of seven members, including Mr. A. W. Fairley, managing director of S.P.C. The members will be Mr. D. J. Pilmer, who will be Chairman, is Assistant Controller of the Department of Supply and Development; Mr. S. W. Gadsden, of Victoria, will advise on matters affecting the canister makers of all States; Mr. E. J. Bowater, of New South Wales,



A load of Apricots leaving a farm for the Leeton Cannery. (Illus. courtesy "Commonwealth Agriculturist.")

meat packing industry generally; Mr. A. W. Fairley, of Shepparton, the jam and fruit canning industry; Mr. J. B. Spencer, of New South Wales, other packing industries; Mr. G. Massey, who is Chairman of the Food-stuffs Committee, is an officer representing the Department of Commerce.

The Board will arrange for supplies of tinplate from overseas, and in Australia will control purchases, distribution, stocks, and the purposes for which tinplate will be permitted to be used. About 150 manufacturing firms throughout Australia will be involved, and the industries concerned are numerous and varied.

## Canned Fruits.

### Increase in Peach Pack.

### Pears and Apricots Down.

In a statement by the Australian Canned Fruits Board, it has been revealed that a substantial increase in this season's Australian canned Peach pack has been noted, but a fall in canned Pears and Apricot production was disclosed in final pack figures for 1941.

The total pack for the three fruits was 2,732,701 cases, which contrasted with 2,587,275 cases for 1940; 2,708,195 cases for 1939, and 3,030,928 cases for 1938. The canned Peach pack aggregated 1,659,404 cases, compared with 1,312,292 last year; only twice before has this season's figure been exceeded—in 1938 and 1939.

Early varieties of canning Peaches this season were exceptionally good, but the yield of Pullars Cling variety later in the season did not come up to expectations. The canned Pear pack of 785,148 cases, compared with last season's record of 877,847 cases. Canned Apricot production was 288,149; in 1940 the pack was 397,136 cases.

## Tomato Board.

It has been predicted by Mr. A. Goyen, Secretary of the Shepparton Tomato Growers' Association, that the Victorian Tomato Growers' Association was hopeful that a State Marketing Board would operate next season.

He said that the Minister for Agriculture (Mr. Hogan) had

informed him that the State Cabinet was sympathetic toward the establishment of a Board.

The Association, continued Mr. Goyen, was confident that the necessary majority of growers would vote for a Board. It would mean better returns for the growers than under the voluntary marketing. Under a Board there would be full co-operation between growers and factories, and supplies would be regulated satisfactorily. At present growers never knew requirements of factories. A Board could regulate both marketing and production.

## Dookie College.

The Principal of Dookie Agricultural College, Mr. G. B. Woodgate, B.A., Dip.Ed., in his report to the Council of Agricultural Education for the month of April, stated that after experiencing the wettest first quarter on record, only 25 pts. were registered for the month, bringing the total rainfall for the year to 1,340 pts.

Although pastures have held out very well, there are signs of wilting and the soil is very dry and hard; good rains would not only revive the pastures, but would also prove a boon in the cultivation paddocks, and in the areas where erosion measures are being carried out.

## Obituary.

We regret to report the death of Ex-Councillor Robert E. Pogue, of the Rodney Shire Council. The late Mr. Pogue passed away during May, after a long illness, at the age of 73 years. He was a member of the Rodney Shire Council for 30 years, and was President on several occasions. He leaves a widow and grown up family to mourn his loss, to whom we extend our deepest sympathy in their sad bereavement.

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Fertiliser Treatments (per tree) applied August	Yields in tons, cwts. qrs.					Average (incl. 1936)
	1938	1939	1940	1941		
4 lbs. Super only - - - - -	11. 2.0	7. 2.2	6. 8.3	10. 3.3	8. 3.3	
do. plus 2 lbs. S/A - - - - -	12.12.2	8. 6.1	7.18.2	12. 8.2	9.13.2	
do. plus 4 lbs. S/A - - - - -	12. 5.1	9. 1.0	7.18.2	14. 2.3	10. 3.0	
do. plus 4 lbs. S/A plus 2 lbs. M/Potash	13. 0.1	8.18.2	7.19.2	13.10.2	10. 2.3	

And results like these from Sulphate of Ammonia are  
supported by many successful orchardists—who regularly  
apply ...

at least 3 lb. per tree for PEACHES;  
more for APRICOTS;  
and still more for PEARS.

Fuller particulars re Kyabram experiment from Chief Advisory Officer,  
NITROGEN FERTILISERS PTY. LTD., 360 Collins Street, Melbourne, C.I.

H59/41

## AUSTRALIAN CANNED FRUITS.

### 1941 Canned Peach Production.

FROM returns furnished to the Australian Canned Fruits Board by canners, it has been ascertained that the undermentioned quantities of canned Peaches (halves and sliced) were processed in Australia during the 1941 season:—

#### Canned Peaches—Halves.

	No. 2½'s, Cases.	No. 1's, Cases.	No. 10's, Cases.	Actual Number Cases.	Total.  On basis of 2 doz. 30 oz. cans per case.
Export Pack:					
Choice	20,313	22,610	—	42,923	42,923
Standard	418,234	121,809	4,752	544,795	544,201
Seconds	216,258	5,068	—	221,326	221,326
Domestic Pack	124,693	9,162	—	133,855	133,855
Total	779,498	158,649	4,752	942,899	942,305

#### Canned Peaches—Sliced.

Export Pack:					
Choice	16,882	19,336	—	35,718	35,718
Standard	372,117	99,172	7,776	479,065	478,093
Seconds	110,844	1,436	—	112,280	112,280
Domestic Pack	73,208	17,800	—	91,008	91,008
Total	572,551	137,744	7,776	718,071	717,099
Grand Total:					
Halves & Sliced	1,352,049	296,393	12,528	1,660,970	1,659,404

## VEGETABLE CANNING IN S. AUST.

Efforts are being made by the S. Aust. Government to encourage market gardening at Loveday and Cobdogla, and the possibilities of establishing the canning of peas and beans as an industry in these areas are being investigated. Also, cotton is being considered as a prospective payable crop and test plots are being conducted.

The S.A. Flax Investigation Committee considers that the growing of flax under irrigation along the Murray is an uneconomic proposition.

According to the Assistant Minister for Commerce (Mr. Anthony) the whole of the exportable surplus of Apricots, Peaches and Pears had been disposed of to the British Ministry of Food.

## NEW FRUIT BEVERAGE.

Apple Raspberry Juice, a new fruit beverage has just been introduced by the N.Y. Agricultural Experiment Station at Geneva.

The beverage is a blend of the juice of Black and Purple Raspberries with Apple juice. The result is something entirely new in the way of fruit beverages.

The new selling agency in the Sydney markets which comprises Leeton Cannery, Batlow, Young and Yenda Co-operatives, is reported to be proving very satisfactory to growers.

## RACEHORSE KEEPS FIT ON APPLES.

Poi Morse, a Sydney racehorse, likes plenty of Apples in his diet to give him winning form.

He is a sprinter of class, as was proved by his second to Winifred in the Rous Handicap on the final day of the A.J.C. Autumn Meeting.

When he arrived in Sydney from the Western District, Poi Morse showed his liking for Apples by helping himself to one which his trainer, C. Windred, was just about to eat. Now he follows his trainer around whenever possible, always hoping for this favored tit-bit.

When Windred mentioned to Mr. N. Smith, who bred and owns the horse, that Poi Morse had taken such a liking to Apples, Mr. Smith replied: "I will send you a case occasionally, so that he does not go short."

Poi Morse is one of the most colorful horses sent from the Western District, and is a model of consistency in his racing. He has been in continuous training for many months, but has retained his condition remarkably well.

When asked to what he owed his splendid form, Poi Morse simply looked around for more Apples.

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MELBOURNE.**



# New South Wales

## The Murrumbidgee Irrigation Area

### Irrigation Research—Development of the Citrus Industry

(By Our Correspondent.)

**Irrigation Research Extension Committee:** Following the appointment of settlers' representatives, the Irrigation Research Extension Committee has defined its aims and functions more clearly. At a recent meeting it was decided that these should cover a wider scope than the present name of the Committee might suggest.

The Committee, which comprises representatives from the C.S.I.R. Research Station, Department of Agriculture, Rural Bank, Water Conservation and Irrigation Commission, and as previously stated, settlers' representatives, can be said to truly represent general interests on the M.I.A.

1. The Committee to be a consultative and critical body to be concerned with major aspects of agricultural development on the M.I.A.

2. The Committee to function as an executive or "action" body for initiating or accelerating important agricultural activities. Such action would be subject to the mutual agreement of all parties concerned.

To avoid any misunderstanding, members indicated that extension work is the duty and responsibility of the Department of Agriculture.

The personnel of the Committee is as follows: Department of Agriculture: Messrs. C. G. Savage (Chairman), C. J. Horth, E. C. Connor. M.I.A. Co-operatives' Executive: Messrs. A. G. Enticnap, V. W. Letheren, V. C. Williams. Water Conservation and Irrigation Commission: Messrs. F. K. Watson, J. G. Youll, H. N. England. Rural Bank: Messrs. T. R. Iredale, C. T. Lasscock, H. G. Williams. C.S.I.R. Irrigation Research Station, Griffith: Messrs. E. S. West, R. A. Pennefather (Secretary).

#### Record Wine Grape Crop.

The record wine Grape crop which is now practically complete and was previously stated in these notes as expected to exceed 17,000 tons, actually reaches the immense total of 20,000 tons. It is not generally known that Griffith grows 80 per cent. of the N.S.W. wine Grape production. The result in wine and spirit is over one million gallons.

#### Mirool Area Drainage.

£170,000 being spent on this important work should ensure that there would not be a repetition of the disastrous results of the 1939 floods.

Mr. C. C. Corbett, of the Irrigation Commission, in a recent lecture said there were three aspects of drainage to be considered: Its present state; the

source of trouble as in 1939; the proposals for relief.

The lecture (as reported by the "Area News") is given as follows:

Assisted by a large scale map, he pointed out that the Mirool Creek and the Main Drain (which entered Mirool Creek eventually but outside the Area) were the main drainage channels. Lake View drained into Lake Wyangan, and Warburn district into a shallow depression called Warburn Swamp. But nearly all Mirool Area drained into the Main Drain.

Drainage was originally designed to take the surplus drainage from the farms. When it was planned, there were no accurate records of the Area's rainfall, and it was generally considered as an arid district with little rain. When Rice growing commenced, large volumes of water had to be used and larger drains were constructed. In 1939 heavy floods were experienced, and their effects became accentuated as so much rain had fallen previously that the ground was saturated and there was a big run-off. This state of affairs had never before been visualised. Flooding in the dry area caused Mirool Creek to run high, and Cumbungi retarded the flow and caused spreading, though, fortunately, mostly over large area farms.

The really disastrous rains fell in April, 1939, when four inches fell in one day, particularly in the Scenic Hill area. There the run-off, both north and west caused flooding of farms which, in some cases were under water for several days. Prior to this the Irrigation Commission had investigated several proposed schemes and was awaiting money to proceed with them. The floods caused an immediate start on the scheme from the Three Ways Bridge westward to Tharbogan to pick up the water from the hill. It cost approximately £11,000, and increased the minor drain's capacity by five. This drain should protect all farms north and west of Griffith.

A new drain was also constructed to Lake Wyangan at a cost of £2,000, five or six times bigger than the original drain, and this should offer a run-off for exceptional rains.

These drains are now complete, and the speaker expressed the opinion that these parts of the Area were fairly safe.

In another section, the Commission was investigating a proposal to drain from Beelbanger



Peach, Apricot and Cherry stocks at the nursery of Mr. H. N. Wicks, Balhannah, South Australia.

along the northern branch canal under the two railway lines, past the industrial sites, and ultimately to the main drain. Other portions of the Area were being surveyed and it was hoped that contracts would soon be let for works necessary to make these parts safe also.

It was useless, however, to work on contributory drains if they could not empty quickly and get their waters away. The trouble in 1939 was often at the junction of the contributory drains with the main drain. It was therefore necessary to enlarge the main drain, and the work has been proceeding and is already complete up to Yoo-gali. It can now take 200 cubic feet per second; its bed has been lowered and the contributory drains can now enter it more freely.

One big trouble has been Mirool Creek. This must be used at East Mirool as the main escape for irrigation waters coming down from Berembend. Water at times must be diverted into it. As there is always water in it, there is also cumbungi, and this retards the flow and restricts the emptying of the main drain into the creek.

It is now proposed to build a new drain, running parallel with the creek from East Mirool for more than 30 miles, to Baren Box. This drain will cost approximately £100,000, and will be capable of taking water at the rate of 200 cubic feet per second. This drain would keep surplus water from Mirool Creek, which would then revert to its original state, becoming dry in the Summer. The cumbungi could then be burnt off. It is hoped to commence this new construction in the next financial year.

Besides this huge scheme, other works, such as cleaning other drains and lowering their beds and cleaning and lowering culverts, should free the Area of a recurrence of the damage of 1939.

#### Table Grape Position.

Not sharing fixed prices like other fruits such as canning Peaches and Apples, returns for Table Grapes have been far from satisfactory. This has not been helped by the absence of the usual export channels for the

Ohanez variety considerable quantities of which still remain on the vines.

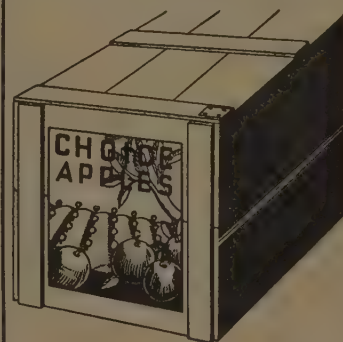
#### Inspection Duplication of Area Export Fruit.

This subject was mentioned at the recent local conference of the Fruit Growers' Federation held at Griffith.

One speaker said that fruit—carefully packed on the M.I.A. to make best appeal on the New Zealand and other export markets, passing the careful inspection of Department of Agriculture inspectors on the Area, was reopened, the pack disturbed, and replaced with short counts, after inspection by Commerce Department inspectors at the wharfside.

Consignments of fruit for the Sydney markets are also subject to this duplication of in-

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spection, it was stated, with consequent damage to the pack and cases, involving additional loss to Area growers.

A resolution was carried urging that steps be taken to end this wasteful method, by having export consignments, and fruit intended for home markets, given a final inspection on the Area before despatch.

#### Orchard Survey Investigation.

Doctor B. T. Dickson and Doctor J. A. Prescott, chiefs of the C.S.I.R. Divisions of Plant Industry and Soils, respectively, were present at the meeting of the Irrigation Research Extension Committee held at the Research Station, Griffith, on Thursday, May 8. They discussed with members the latest data from the orchard survey and other matters connected with the report on the M.I.A., which they are now completing.

Dr. Prescott spoke highly of the orchard survey investigation, considering it a very fine example of co-operative research work. He pointed out that the complete results would be published as a C.S.I. R. bulletin, but meanwhile the I.R.E.C., representing both settlers and administrative bodies, was in a position to deal promptly with the results as they became available.

#### Irrigation Research Project Farms.

At a recent meeting of the I.R.E.C., at Griffith, Mr. E. S. West, officer in charge at the Research Station, described work on several project plots on settler's orchards. Plots had been established on the following settlers' farms: Messrs. V. C. Williams, A. L. Gordon, O. L. Longhurst, E. O. Ebert, T. T. Morley and C. E. Hamilton.

Besides studying irrigation methods suitable for the soils and slope found on these farms, plots of three cultural systems have been established. First, Winter tick beans and Summer clean cultivation; second, subterranean clover sod fed down by sheep in the Summer and left untilled; third, 'permanent lucerne mown. Both citrus and Peach orchards were included in the projects.

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#### Citrus Exports.

Though the export of all primary products from Australia depends on the amount of shipping space available and the course of the war, the M.I.A. co-operative group has arranged to export citrus to New Zealand this season and feels optimistic about the results. Already several thousand cases of new seasons' Navel Oranges and Lemons have been despatched.

#### Soil Deterioration—Areas' Greatest Problem.

In a recent talk given by Mr. C. J. Horth, fruit instructor, he stressed the fact that the main problem on the Irrigation Area was one of soil deterioration.

It is, continued Mr. Horth, a community problem affecting farmer and extension worker, producer and consumer, landlord and tenant, financial and research institution.

There has been a considerable amount of discussion around the problem, but at present we are not making much headway towards its solution. Why? Because there is at present no common ground on which we can meet, no truly representative body with which to discuss such matters and make an organised effort to arrest the decline and aid restoration. I am not offering a simple solution, yet I'll suggest one way of tackling the problem—and that is by organised effort, between farmers and extension service. There are two aspects of extension service: the personal, and the wider one which deals with groups, localities, whole communities, by

means of organised groups or associations working to a pre-arranged programme drawn up jointly by both the farmers concerned and the extension service. You may well ask: "Why is there need for: (1) Group organisation; (2) pre-arranged programmes; (3) definite objectives?"

(1) Group organisation is necessary to ensure that matters of vital concern to the community shall receive attention, and that the farmers themselves are taking an active part in arranging and carrying out that work. It is also necessary in order that matters affecting but one or two men may not be overlooked.

(2) Pre-arranged programmes are advisable, otherwise there is little definite progress. Everybody interested should know what is to be done, where, and when. It may not be possible to adhere rigidly to time and date in every instance, but it should not be difficult to keep within certain limits. Programmes well founded, mean progress. Any co-operative movement among farmers has as its primary objective some general or specific improvement in the standard of farming or in farm conditions. It is useless to argue that because the need for improvement has been suggested that this implies a low standard at, present, far from it. But if we are ever unfortunate enough to reach that stage where no "spirit of progress" exists, then we have either reached stagnation and decline has commenced, or else we are all so old we are tottering around

on the brink of eternity, just waiting.

(3) Definite objectives. Why should there be definite objectives? With no objective we have no standard with which to gauge our progress. Neither do we know whether we have undertaken too much for the period of the programme or too little. It is worth while striving after something definite and attainable, it is nevertheless useless reaching for stars we have no hope of gaining.

Our specific objective is the restoration of soil productivity. We have lost trees from flood, from waterlogging, from planting on unsuitable soil and some of these losses mean a lot to individual growers. Restoring some of such plantings is a job of reclamation, a difficult one, one for further investigation. This next statement may seem hard to some of you, but treatment of such plantings is not the major problem.

The major problem concerns the acres now in production and those coming into production. Is there any reason why they should not follow the same decline; is there any real reason why they should?

Let us review our practices, and base our future operations on the following points:—

(1) What is known to be successful practice within the district as demonstrated by actual experience.

(2) Evidence obtained from recent and other research operations.

(3) The application of sound principles of agriculture.



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## N.S.W. ELECTIONS.

In the recent N.S.W. Elections, Labour secured a sweeping majority. The new Premier and Treasurer is Mr. W. J. McKell. The Minister for Agriculture and Forests is Mr. W. F. Dunn; Minister for Lands, Mr. J. M. Tully.

## Mr. Tonking Loses Orange Seat.

The Hon. A. U. Tonking, M.L.A., was defeated. Mr. R. E. O'Hallaran (Lab.) with 5,762 votes, topped the poll. Mr. Tonking (U.A.P.) polled 5,380 votes.

Mr. Tonking was elected first in 1932 as a U.A.P. man, and again in 1935 and 1938. Before establishing himself as a farmer and orchardist in the Orange district, Mr. Tonking was a High School teacher.

He has been Chairman of the Orange Producers' Rural Co-operative Society Ltd., of the Orange Chamber of Commerce, Vice-President of the Fruit-growers' Federation and a foundation member of the Agricultural Bureau.

He served with commissioned rank in the Great War (1914-18).

Mr. A. G. Enticknap (Ind. Lab.) was successful in winning the Murrumbidgee seat when he polled 3,846 votes.

In his policy speech he advocated the use of the Commonwealth Bank to arrange war finance; a serious attempt to make primary production remunerative; limitation of profits; a living wage for farm workers; a guaranteed supply of water for the irrigation areas, and a decrease in the cost of living.

Mr. J. C. Thorne, U.C.P. candidate for the Murrumbidgee Seat, polled 1,017 votes.

Major A. D. Reid (U.C.P.), the retiring member for Young, was re-elected to the Seat at the recent State Elections. He recorded 5,461 votes. Major Reid was Minister for Agriculture in the last Government.

## TUNG OIL.

After 15 years' research study, Messrs. A. R. Penfold and F. R. Morrison, of the Sydney Technological Museum, recently made a report of their investigations on the Tung Oil tree (*Aleurites Fordii*).

They state that the trees grow well in many localities on the East Coast of Australia.

About 600 growers in N.S.W. and Queensland are experimenting with the Tung Oil tree. The Australian product is at least the equal of the imported article.

The Tung Oil tree produces oil which is used extensively in the manufacture of waterproof varnishes, enamels, paints, rubber substitutes, linoleum, etc.

It is believed that with adequate research the industry would be successful in this country.

## HAIL INSURANCE.

## N.S.W. Attempts Levy.

**A**N EARNEST ADVOCATE for an effective hail insurance programme is Mr. H. V. Smith, of Batlow, N.S.W., and Chairman of the N.S.W. Committee of the Apple and Pear Board.

The N.S.W. Committee decided to deduct 1d. per bushel case from January 1 and 2d. per bushel from March 1, from all advances to growers. The cover suggested was 4/- per bushel from January 1 to March 31, the premium to be 2d. per case. Legal opinion, however, was to effect that this could not properly be done, and such deductions as have been made are being returned to the growers concerned.

The N.S.W. Committee has expressed regret and disappointment that such contributions, which were being made by the industry in N.S.W. to assist growers who suffered loss through hail, could apparently not be accepted in legal form by either the N.S.W. or Commonwealth Governments.

They point out that some means are necessary to provide compensation for growers who suffer loss in this way.

Losses assessed by the Department of Agriculture, N.S.W., show that many growers suffered severely. A total of 225,000 bushel cases of Apples and Pears were so damaged by hail as to reduce the quality below Good grade, and a total of 111,750 bushel cases were reduced from Fancy to Good grade.

## QUEENSLAND FRUIT ON VICTORIAN MARKETS.

During May Bananas have been in moderate supply; prices easier than last month.

Pineapples have been steady; prices inclined to rise.

The Paw-paw season commenced with prices high, but have now eased off slightly owing to heavier supplies.

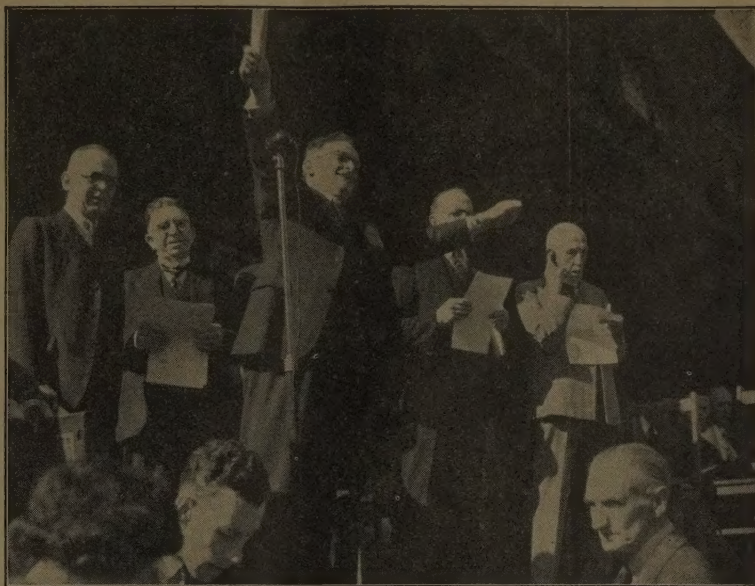
Custard Apples were steady throughout the month.

Emperor Mandarins were received in fairly heavy quantities but held their price well owing to the comparatively high price of Oranges in the early part of the month.

Glen Mandarins were of special quality and prices were very high for this time of the year.

Small supplies of Avocados came to hand.

Queensland Grapefruit was sent early in the month, but owing to heavy local and other States' supplies, the Queensland fruit eased off.



AT SYDNEY MARKETS WAR FUND RALLY.

Left to right: Dr. R. J. Noble, Director of Agriculture, Messrs. W. Musgrove, C. Miller (leading Community Singing), J. J. Mason, and Rt. Hon. W. M. Hughes.

## SYDNEY'S PATRIOTIC EFFORTS.

## Valued Work by Markets Industries War Fund Committee.

About £10,000 has been collected in the Sydney Markets for war funds. A vigorous Committee is actively at work, and contributions are received from the merchants, traders, employees, carters, and all connected with the Sydney Markets—fruit, vegetables, fish, poultry, etc.

The sum of £6,000 has been handed to the Government as a gift for war purposes; other disbursements include £815 to relieve distress in England; £125 to the Lord Mayor's Fund; £500

to necessitous dependents of men enlisted from the Markets; £250 towards a mobile kitchen in England.

The next objective is to provide sufficient funds to buy a bombing plane.

Rallies are held from time to time in the Markets. At a recent rally Hon. W. M. Hughes, M.P., was the chief speaker; he spoke with undiminished vigor and roused great enthusiasm. On the platform were soldiers returned from Libya.

The work of collecting funds is steadily proceeding.

Messrs. Reedy Bros., fruit merchants, Sydney, organised a Ball to raise funds for war purposes. This was held on May 30, and was a very successful event.

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## NEW SOUTH WALES.

Sydney: The following notes and prices are taken from the "Weekly Marketing Notes" issued by the N.S.W. State Marketing Bureau, for week ending May 28, 1941.

Demand for choice, colored

Apples was well maintained during the period, and rates were firm. Tas. and Vic. Jons. were available; supplies comprised mainly 2½ to 2¾ inch sizes. Local Del. were somewhat scarce and mostly of small counts. Tas. Cleos. met only a moderate inquiry. Request for

local G. Smiths was steady, while R. Beauties cleared satisfactorily.

Packham's T., W.C., B.B., Jos. and Glou Morceau Pears were fairly plentiful; the two first-mentioned varieties were in most request.

Supplies of Navel Oranges

showed a marked increase and, early in the period, sold satisfactorily. Subsequently inquiry slackened, and, despite lower prices, disposals were slow, particularly of large fruit, which constituted the bulk of stocks.

Mandarins were fairly plentiful, but apart from choice, well colored packs, sales were slow. Consignments of Queensland Glen Retreats were on offer; some particularly attractive fruit was included, and up to 17/- per bushel was realised, with an occasional sale at higher rates.

Demand for Lemons continued to be dull, but, except for choice, colored lots, values were unchanged.

Coastal Grapefruit was in lighter supply, but request limited. Some inland packs met a better inquiry and realised to 16/- bush.

Waltham Cross and Ohanez Grapes cleared steadily, but Cornichons were difficult to sell, even at the low values ruling.

Consignments of Pineapples were comparatively light, but, owing to a large percentage of the fruit being of large size, clearances were slow. Generally best packs sold from 12/- to 13/-, while lower grades were obtained from 7/- case.

Fairly large quantities of Custard Apples arrived from Queensland at bi-weekly intervals and met a good demand.

Papaws were more plentiful, but inquiry was slow and values lower.

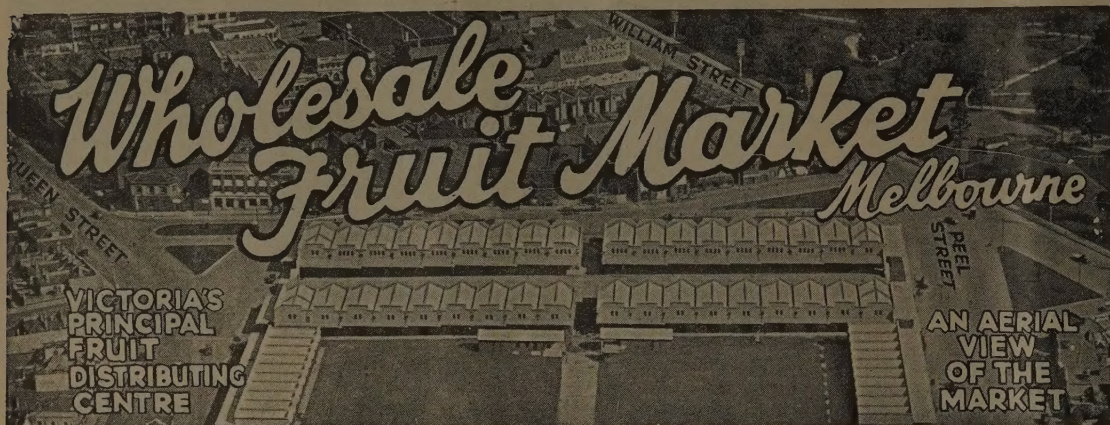
Choice Passionfruit cleared satisfactorily, lower grade lines were only in moderate request.

Prices:—

Apples: G. Smith, 4/6 to 9/-; Jon. (Interstate), 4/6 to 8/6; Cleo. (Tas.), 5/- to 7/-; R. Beauty (N.S.W.), 5/- to 8/6; Demo. (Interstate), 5/- to 7/- case.

Pears: Packham's T., 6/- to 11/-; W.C., 5/- to 10/-; Packham's T. (Interstate), and Jos. (Vic.), 5/- to 8/-; W.C. (Interstate), 6/- to 9/6; B.B. (Interstate), 5/6 to 7/6; Glou Morceau, 5/- to 7/- case.

(Continued on page 27.)



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WHOLESALE FRUIT MERCHANT

Prompt Returns and Sales Notes Daily  
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29-30 Wholesale Fruit Market

WHOLESALE FRUIT MERCHANT

& COMMISSION AGENT

Telephone: F 5550.

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Wholesale Fruit Merchants,  
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CONSIGNMENTS OF FRUIT AND  
VEGETABLES SOLICITED.  
Tel: F1023; Private: JW2528.  
Bankers: E.S. & A. Bank,  
Market Branch.

## T. Stott & Sons Pty. Ltd. FRUIT MERCHANTS ESTABLISHED 1892.

26, 36 Wholesale Fruit Market, Melbourne. And at VICTORIA MARKETS.

COUNTRY AND INTERSTATE ORDER TRADE SUPPLIED.

SHIPPING No. 41.  
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PROMPT SETTLEMENTS.

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Bankers: Bank of Australasia, Melbourne.

Regular Supplies of  
Quality Fruit well Packed  
and Graded will realize  
the Best Prices.

Tim Young & Co.  
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Growers can be assured of receiving  
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Cable Address "TIYOUNG"

A.B.C. Code, 5th Edition.  
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Accredited Selling Agent S.A. Tomato, Celery, and West Australia Tomato  
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General Commission Agent.

PROMPT RETURNS.

£1,000 FIDELITY BOND.

9 WHOLESALE FRUIT MARKET, Box 4076, G.P.O., Melbourne.  
Members Wholesale Fruit Merchants' Assn. of Victoria.

H. & S. FRANKEL

(Established 35 Years)

No. 44 WHOLESALE FRUIT  
MARKET, MELBOURNE.

Growers in all States are invited to  
send consignments. Highest market  
rates and prompt settlements.

Telephones—

Store: F 4874.

Private F 1555 & FW 3711.

Bankers—

Commonwealth Bank of Australia.

"Growers' interests further protected  
by our Fidelity Bonds."

A. E. PITT

Established 1893.

Accredited Agent for Growers'  
Organisations in all States.

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MARKET, MELBOURNE.

Consignments Solicited from all  
States.

Growers Will Receive Top Market  
Value and Prompt Returns.

Fidelity Bond Guarantee for £1,000

13 and 14 Victoria Market.

Pea and Bean Stands.

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Phone: F 5035.

## Fruit Merchants and Exporters of South Australia

Growers! Consign your Fruit to

H. C. Austin

Wholesale Fruit and Produce  
Merchant, General Exporter, Com-  
mission Agent, Shipping Provider.

Specialty Overseas Export  
All Countries.

New Market, Union St.,  
Adelaide

Phone C 746. G.P.O. Box 722  
Telegrams: Austin Fruit.



Some special lines of all varieties of Apples and Pears are realising higher prices.

**Grapes:** Black varieties (other than Muscat), 2/6 to 4/-; White, 3/- to 6/-. **Passionfruit:** 4/- to 9/- (few specials 10/-). **Custard Apples:** 3/- to 5/- half case.

**Bananas:** Nines and Eights, 15/- to 16/-; Sevens, 13/- to 15/-; Sixes, 10/- to 12/- (specials dearer, ripe and inferior lower). **Papaws:** 8/- to 12/-. **Pineapples:** 7/- to 12/- trop. case.

**Oranges:** Navel, Coastal, 4/- to 7/-; Irrig. Area, 5/- to 8/-; Common, 3/- to 5/-. **Lemons:** Coastal, 3/- to 7/-; Irrig. Area, 7/- to 9/-; Q'land., 8/- to 12/-. **Mandarins:** Emperor, 3/- to 7/- (specials higher); Imperial, 2/- to 5/- half case; Glen Retreat (Q'land.), 10/- to 17/- bush.

**Grapefruit:** Coastal, 4/- to 7/- (specials higher); Inland, 7/- to 10/-; specials, to 16/- case.

### SOUTH AUSTRALIA.

**Adelaide (2/6/41):** The following notes and prices are supplied by the S.A. Fruit-growers' and Market Gardeners' Association Inc.

The undermentioned quotes are for f.a.q.

**Vegetables:** Beans (French), 7/- doz. lbs.; Beetroot, 1/6 doz.; Brussels Sprouts, 6/- doz. lbs.; Cabbages, 4/- to 6/- doz.; Carrots, 2/6 doz. bchs.; Cauliflowers (large), 7/- doz.; Celery, 3/-, specials 3/6 doz. hds.; Leeks, 2/- doz.; Lettuces, 1/6, 2/- doz.; Onions, 9/- cwt.; Parsnips, 2/- doz. bchs.; Peas, River 8/- 10/-, Pirie 13/-, 14/- bushel; Potatoes, 5/- cwt.; Rhubarb (Cherry), 1/- doz. lbs.; Tomatoes, 10/-, 12/- ½ case; Trombones, 5/- cwt.; Turks Head, 5/- cwt.; Turnips, 2/-, 2/6 doz. bchs.; Triangles, 5/- cwt. Cases extra.

**Fruits:** Oranges (Navel), 9/-, 11/- case; Grapefruit, 12/-; Lemons, 10/-, 12/-; Bananas, 22/-, 24/- crate; Pineapples, 14/-, 18/- crate.

### VICTORIA.

**Melbourne (2/6/41):** Good Jonathan Apples a shade dearer. Sales of fruit slow. Citrus fruit dull, Lemon supply light. Quotations (bushel case, unless stated):—Apples, eating, 6/- to 8/-, inferior lines lower; do., cooking, 4/6 to 6/-, few special higher; Grapes, 10/- to 16/-, few special lines higher, wet and inferior lower; Oranges, Navel, 6/- to 13/-, few special higher; Lemons, average standards, 8/- to 10/-, good standards to 11/-, selected to 12/- and 13/-; Grapefruit, 7/- to 13/-, few special higher; Mandarins, 8/- to 15/-, few special higher; Pears, dessert 6/- to 10/-, do., culinary, 4/6 to 7/-; Papaws, Queensland, 12/- to 16/- double case; Quinces, 5/- to 7/-; Bananas, Queensland (green), 6's 10/- to 15/-, 7's 15/- to 17/-, 8's and 9's 17/- to 19/- double case, few special higher; Pineapples, Queensland, 10/- to 15/- double case; Passionfruit, 5/- to 10/- half case, few special higher.

## The Pig Pen

### FEEDING OF PIGS.

Little preparation is needed for most feeds for pigs.

Maize may be fed shelled or on the cob; it is not materially improved by grinding. On the other hand, coarsely grinding or cracking small grains results in a saving of feed. The extent of this saving depends somewhat on the hardness of the grain, but firstly on the method of feeding.

The pig is a rapid eater when being hand fed in a group, and a large number of small hard grains miss the teeth and pass through the body unutilised. Pigs accustomed to eating from a self-feeder eat more slowly and masticate their food.

Soaking is not a good substitute for grinding small grains and it does not improve the value of maize or cracked grains.

Cooking reduces the value of most foods for pigs, with the exception of hotel and slaughter-house refuse, soya beans and potatoes.

A slight benefit will result by feeding a warm swill in very cold weather.

### PIG INDUSTRY FACING CRISIS.

**THE SERIOUS PLIGHT** of the pig industry was stressed in an address by Mr. L. A. Downey, H.D.A., Pig Expert, Victorian Department of Agriculture, at the recent conference of the Chamber of Agriculture, at Bairnsdale.

Suggested remedies include trade with the East, better pig husbandry, the supply of pig meat of improved quality in more attractive packages and at lower prices to encourage consumption within Australia.

### PORK CHOPS AND APPLE SAUCE!

An advertising campaign, being sponsored by the American Meat Institute, has been responsible for increasing the demand for Apples. Many growers have noted an increase in the call for Apples when pork is featured in meat advertising. Pork chops and Apple sauce have a dietetic appeal.

## HOME NOTES

### FRIENDS.

Isn't it fine, when things are going  
Topsy turvy and askew,  
To discover someone showing  
Good old-fashioned faith in you?

Isn't it good, when life seems dreary  
And your hope's about to end,  
Just to feel the handclasp cheery  
Of a fine old loyal friend?

Sure! one fellow to another  
Means a lot from day to day.  
Seems we're living for each other  
In a friendly sort of way.

When a smile or cheerful greeting  
Means so much to fellows sure,  
Seems we ought to keep repeating  
Smiles and praises more and more.

### TIME-TABLE FOR COOKING VEGETABLES IN WATER.

Artichokes: 30 to 35 minutes in salted cold water.

Asparagus: 25 minutes, in salted boiling water.

Beetroot: 1½ to 2 hours, in cold salted water, with vinegar added.

Carrots (whole): 1½ hours, in cold salted water.

Carrots (sliced): ¾ hour, in cold salted water.

Cabbage: 25 minutes, in boiling salted water.

Cauliflower: 30 minutes, in boiling salted water.

Celery (inner stalks): 1 hour, in cold slightly salted water.

Celery (outer stalks): 1½ hours, in cold slightly salted water.

French Beans: 20 to 25 minutes, in boiling salted water.

Green Peas: 25 to 30 minutes, in boiling salted water, teaspoon sugar, and stalk of mint.

Marrow: 30 minutes, in cold salted water.

Onions: 1 hour, in boiling salted water.

Parsnips (whole): 1 hour, in cold salted water.

Parsnips (sliced): ½ hour, in cold salted water.

Potatoes: 20 to 40 minutes, in boiling salted water.

Pumpkin: 35 to 40 minutes, in cold salted water.

Rice: ½ an hour, in boiling salted water.

Spinach: 20 minutes, in boiling salted water.

Turnips: 1 hour, in cold salted water.

All green vegetables to be boiled with lid off.

### TO REMOVE STAINS.

**M**ANY HOUSEWIVES find difficulty in satisfactorily removing stains that so often appear on table cloths and clothing.

Greasy marks can be removed by first rubbing on sweet oil, or olive oil, or unsalted butter. Allow to lie for a while and then sponge off with warm soapy water.

Blood stains and wine stains can be removed with salt water.

To remove greasy marks from navy and black garments, use one teaspoon of liquid ammonia to a cup of water and brush. For faded navy place water in a basin and add ordinary ink until you cannot see the bottom of dish. That means until the ink clouds it. Then add sufficient ammonia to blacken it. Brush your garment well with this preparation, hang it out to dry and then press out over a cloth.

### CARE OF THE HAIR.

The Bible says that her hair is a woman's glory, but that was written before shingles, bobs and perms were known and luxuriant heads of long hair were popular. To-day, women rub warm olive or coconut oil into the hair, before shampooing, to prevent dryness. A little lemon juice in the second-last rinsing water will give the hair a live appearance.

Other hints include: never allow perspiration to remain in the hair. Shampoo frequently. Never put oil on a dirty scalp, shampoo it first. Combing is even better than brushing the hair and induces circulation of the blood, exercises the hair, pulls away dried or loose hair and nourishes the hair roots. Brushes should be kept clean always, soaking them for a few minutes in washing soda will clean them and stiffen the bristles.

To clean ivory knife handles, sponge them with warm water and a little borax.

### SPECIAL NOTICE TO FRUITGROWERS

In response to numerous requests from growers for information as to who are members of the **WHOLESALE FRUIT MERCHANTS' ASSOCIATION OF VICTORIA**, the following list is given. All are members of the above Association, and are registered firms carrying on business in the **WHOLESALE FRUIT MARKET, MELBOURNE**. (All Members under Fidelity Bond)

Stand Numbers are as indicated in Parentheses.  
**T. STOTT & SONS PTY. LTD.** (26-36).  
**H. L. E. LOVETT & CO. (23).**  
**A. E. PITT (14).**  
**J. DAVIS PTY. LTD. (8).**  
**W. S. TONG (31).**  
**SILK BROS. PTY. LTD. (24-25).**  
**F. G. MUMFORD (35).**  
**GOLDEN VALLEY FRUIT CO. PTY. LTD. (15).**  
**J. W. BOSS (13).**  
**H. M. WADE & CO. (21).**  
**DAVID SMITH PTY. LTD. (3).**  
**SILBERT SHARP & DAVIES PTY. LTD. (17).**  
**WATKINS FRUIT COMPANY PTY. LTD. (5).**  
**G. WOOLF & SONS (29-30).**

**B. CORNISH & SONS (5).**  
**J. HYMAN & SON (51).**  
**HERBERT WILSON PTY. LTD. (10).**  
**FRANK BOOTH & SONS PTY. LTD. (16).**  
**GEO. LISTER PTY. LTD. (12).**  
**TIM YOUNG & CO. PTY. LTD. (18).**  
**F. W. VEAR PTY. LTD. (26).**  
**YEE HOF LOONG & CO. (32).**  
**H. LOUEY FANG & CO. PTY. LTD. (4).**  
**WING YOUNG & CO. (38).**  
**D. MENTHPLAY & CO. PTY. LTD. (27).**  
**PRICE & KING PTY. LTD. (2).**  
**EBGAN & KENNY (Successors to Wm. Sweeney) (33).**

Office: 21 Wholesale Fruit Market, Queen St., Melbourne, Phone: F 4866.

Correspondence is invited by the Association.



# Tasmanian News and Notes

SEASONAL CULTURAL WORK — £20,000 FOR HAIL AND FROST RELIEF — CANNING WORKS AND EVAPORATORS WORKING AT FULL PRESSURE — CONTINUANCE OF ACQUISITION ADVOCATED.

(By Our Correspondent.)

**Seasonal Notes.**  
**M**ANY ORCHARDISTS in the north of the State have finished picking the crop, which, owing to weather conditions throughout the season, were patchy and well below normal. There were good Autumn rains in most localities, though April was under the average rainfall. The usual "between-season" jobs are being cleaned up ready for pruning. Efficient help is increasingly difficult to get.

**Hail and Frost Relief.**  
The State Government has made £20,000 available for the

relief of those orchardists who were hit very hard by frost and hail, etc.; it takes the form of a loan for seven years free of interest for a number of years.

In the southern districts there is still some fruit on the trees, but picking should be completed by the end of May.

All canning factories and evaporators are working full time for an extended season, and it looks as though most of the Sturmers of suitable size will be used; this variety seems to be the most satisfactory for both purposes.

Considering the shortage of help for picking, I think that most growers are delivering their fruit as punctually as could be reasonably expected.

The prices on the Sydney market seem to be rather disappointing, especially as the quality is good and only the popular sizes are going forward.

The Acquisition Committee is now paying out on account of progress payments as well as presentation costs, and appear to be as prompt as could reasonably be expected considering the work entailed in checking over so many complicated accounts.

There is a very definite feeling all over the State in favor of continuation of the acquisition scheme for the duration of the war, and it is hard to understand the opposition shown in parts of Victoria and N.S.W., where the compensation paid is higher than in Tasmania and W.A. Surely they don't realise what would be the result of un-

controlled marketing while the export trade is completely cut off. Tasmania's huge surplus would flood the markets and fruit would be practically un-saleable.

I can't believe that the average grower in N.S.W. ever realised a price equal to the prices paid by the Government under the acquisition plan, and I am sure that they won't next year if they succeed in destroying the plan.

What is there to take its place?

Various faults in administration can be altered, and I hope will be, as they are not an integral part of the scheme.

Have a care, Victoria and N.S.W. oppositionists. It's no use cutting your throat to stop your nose bleeding.

Tasmania, 21/5/40.

## ADVERTISING APPLES IN U.S.A.

### Half-penny per Box Levy.

In the State of Michigan, U.S.A., a law was enacted for the collection of a levy of 1 cent per bushel on Apples, for advertising. In a test case before the State Supreme Court, the Act was declared valid.

Then the Farmers' Protective League was formed to secure a repeal of the Act, but this was unsuccessful.

The Act is supported by many growers, and meetings were held to familiarise growers with the methods of collection and administration. The dissentients object to the use of stamps on the boxes. An endeavor is being made to secure collection of the levy without the use of stamps.

The Supreme Court's decision in validating the Legislation was of particular interest as several other States are projecting similar legislation.

## CO-OPERATIVES IN U.S.A.

There are 10,700 active co-operative organisations in U.S.A.

The groups marketing dairy products led in the number of members with 620,000, and in volume of business, at \$112,000,000. Other principal commodities in their order of importance were grain, dry beans and rice, \$60,000,000; livestock, \$56,000,000; fruits and vegetables, \$54,600,000, and cotton, \$15,600,000.

## QUEENSLAND'S SUGAR.

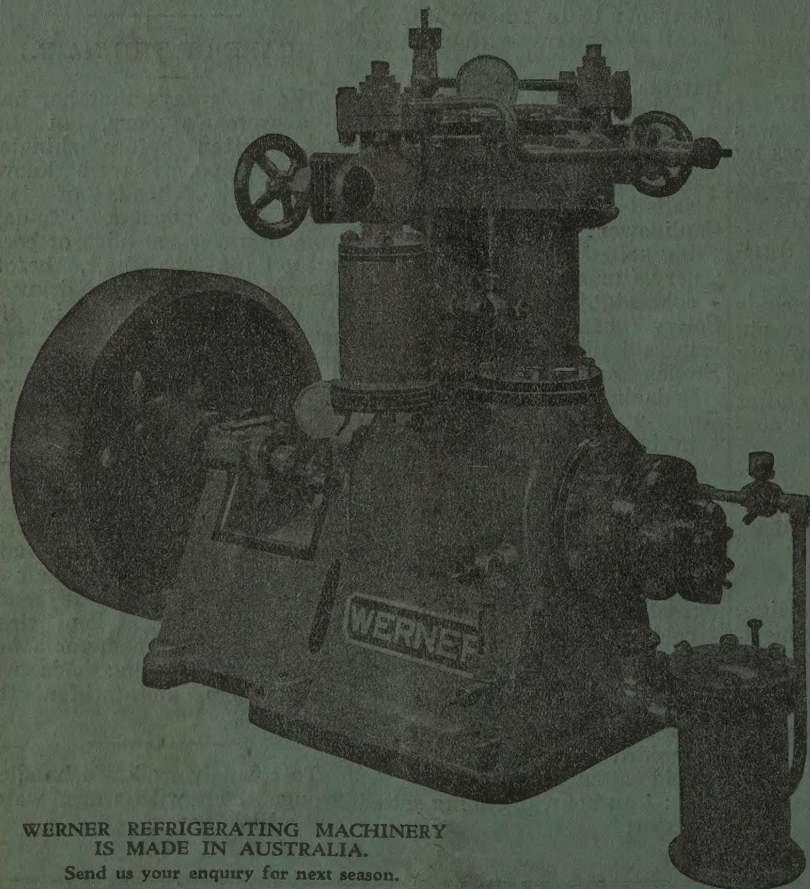
With a final payment of about £1,500,000 to be distributed at the end of this month, Queensland's sugar cheque for 1940 will be £13,000,000.

The Secretary of the Australian Sugar Producers' Association (Mr. C. P. Curlew), stated that although the industry was £1,000,000 worse off, it had also had to bear increased costs of production and administration charges, as well as a greater taxation burden. Consequently, the position of the industry was far from satisfactory.

# "WERNER" PLANTS Refrigerate Over 1½ Million Cases

of Fruit in over 60 Stores throughout the Commonwealth

We design and Install Plants to Store from 500 Cases upwards



Enclosed Type  
Ammonia  
Compressor  
Suitable for  
Full  
Automatic  
Control

Direct  
Expansion  
or  
Brine  
Circulation

Type of  
Compressor made  
by Werner from  
10-ton  
upwards

WERNER REFRIGERATING MACHINERY  
IS MADE IN AUSTRALIA.  
Send us your enquiry for next season.

# R. WERNER & CO. PTY. LTD.

Refrigerating Engineers

54-86 BURNLEY STREET, - - RICHMOND

Phones: J 1161 (6 lines).

CITY SHOW ROOM: 610 LITTLE COLLINS STREET, MELBOURNE. Phone: MU 6275.

SOLE AGENTS—

West. Aust.: Atkins (W.A.) Ltd., 894 Hay St., Perth.

South Aust.: W. J. White, 56 Franklin St., Adelaide.

Tasmania: Noyes Bros., Hobart and Launceston.

N.S.W.: Stuart Walker & Co. Pty. Ltd., 174

Clarence Street, Sydney.

Q'land: Garoche Pty. Ltd., Woolloongabba, Brisbane.